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THE CHINESE:

A

GENERAL DESCRIPTION

OF

THE EMPIRE OF CHINA

AND

ITS INHABITANTS.

BY

JOHN FRANCIS DAVIS, ESQ., F.R.S., &c.

IN TWO VOLUMES.

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CHAPTER XI.

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Although the circuit of the ancient walls of Nanking exceeds that of the present capital of China, it has been already stated that the larger portion of the area is now either a waste, or consists of fields in a state of cultivation. The last embassy had an opportunity of inspecting it in 1816, having been detained in the immediate neighbourhood for about two days, from the 21st to the 23d October. The opportunity was improved to the utmost, and the liberty with which we were enabled to satisfy our curiosity received some addition in consequence of an accident, wherein the firmness of the ambassador was exercised with a favourable effect.

Soon after the fleet of boats which conveyed the mission had reached the suburbs of Nanking, on that great river the Keang, which flows a few miles to

the northwest of the old capital, the ambassador was induced, by the reports of some gentlemen of the mission, who had already explored a portion of the interior of the walls without any objection being made, to visit the nearest gate on the northwest side. On reaching it, however, a mandarin of subordinate rank, on horseback, with a pack of Chinese soldiers after him, rushed past and closed the gates suddenly in the face of the party. In return for this rudeness to the principal person of the mission, the individual who had caused the gates to be shut was requested to open them again, and it was declared that on no other condition would the ambassador quit the spot. The underling, however, who had committed the offence, showed no disposition to repair it, but took his departure in an impudent style. His excellency, on this, requested two individuals of his suite, of whom the writer was one, to proceed as fast as possible to the imperial legate, who acted as conductor to the embassy, and complaining formally of the insult which had been offered him, required that reparation should be instantly made. They were civilly received on board the Kinchae's boat, who, when they had explained the nature of the offence, immediately said that the person who had been guilty of it must be out of his wits, and sent at once to the highest military officer in the neighbourhood, to desire that he would go and see the gates reopened instantly. The two gentlemen in the mean while walked back to rejoin the ambassador, accompanied by a very fat and asthmatic mandarin of the order of the blue button, who had much ado to keep up with their rapid pace. On their reaching the gate, the Chinese general who had been despatched by the legate presently arrived, and, apologizing for the folly of the officer, caused the gates to be reopened. The ambassador expressed himself satisfied, and declined

entering the gate, telling the general and the rest that he was sorry they had had so much trouble.

A large assembled crowd had seen the transaction, and it evidently had a very favourable effect on their conduct, which became more civil than ordinary. In the course of the same day several gentlemen were allowed not only to pass the gate, but to proceed as far as they pleased into the interior; and, from a high wooded hill within the wall, could see the modern town to the south, which occupies barely a third of the immense area. The ancient name of *Nanking* (the southern capital) is still in common use, but no longer admitted in official documents, wherein it is styled *Keang-ning-foo*, a city of the first order, but still merely the chief town of a province. The porcelain tower of Nanking (which, however, is porcelain in nothing but its tiles) was a conspicuous object in the distance, and tempted some of the party to undertake a walk to the modern town to inspect it. They reached the suburb without interruption; but the vast and dense crowd which presently surrounded them made it imprudent to persevere, and they were obliged to give up the principal object of their excursion. It was satisfactory, however, to have gained even this insight into the present condition of the ancient capital of China, which had never been visited by a former embassy. The following is from an unpublished journal of Sir George Staunton on the same occasion.

"The view from the summit of the hill (within the gate) certainly well rewarded us for the labour of the ascent, and was a perfect panorama. On one side, and, as it were, beneath our feet, lay the suburb which we had just quitted; the noble stream of the Yangtse-keang, with its several branches, or rather subdivisions; and beyond them the pagoda of the city of Poo-keu-hien, and a distant range of

hills in the horizon. On the other side was a beautiful vale of many leagues in extent, the whole of which, with several lesser eminences within its enceinte, is included within the ancient boundaries of the imperial city. We could trace with the eye, assisted by a telescope, nearly the whole circuit of the walls; but within the vast space which they enclosed we look almost in vain for the habitations of men, or any traces of the former populousness of this ancient capital of China. Even the very ruins and vestiges of the buildings which we are led to conclude must formerly have filled this space have disappeared; and at present clumps of trees, orchards, cultivated fields, and gardens, and a few scattered farmhouses occupy their places. At a distance, indeed, beyond an elevated ridge to the westward, we could perceive that a part of the valley was overhung with a cloud of smoke, which partially disclosed a few considerable buildings, and no doubt arose from that portion of the city which continues to be inhabited. We could distinguish pretty clearly the roofs of two or three buildings resembling temples, two arched gateways, and three pagodas, one of which, from its superior size and stateliness, and its proximity to the river, we immediately concluded to be the famous porcelain tower, and in this opinion we were confirmed by our Chinese conductors."

The desolation which took place in this ancient seat of the native sovereigns may no doubt be ascribed to the Tartar conquerors, who demolished the imperial palace, and even the sepulchres in the rage of war. Much, however, may be attributed to another reason, which sufficiently explains why, except the great wall, there are few ancient monuments in China. Their edifices are far from being of a solid construction, the columns being in most cases of wood, and the climate throughout the country subject to the greatest vicissitudes of moisture and dry-

Nine-storied Pagoda.

ness, as well as of heat and cold. The nine-storied buildings called pagodas, being of good solid brick work, are among the most lasting. That of Nanking is at the head of these monuments, which are of a religious nature, and, like the steeples of churches, were at first attached to temples. Several still remain with the religious establishments to which they belong, besides the one at Nanking a printed representation of which, with a description attached, was purchased by some of the embassy while in the neighbourhood. Its dimensions are nearly two hundred feet in height, the ground plan being octagonal, and the spiral staircase built through the solid part of the wall, which surrounds a hollow space in the centre that is carried to the summit of the building. In niches at the sides of the stairs are placed images of Budh, or of the goddess Kuân-yin.

Nanking being situated in lat. 32° 04′, the excellence of the climate, joined to its proximity to the great Keang, still renders it a populous place with a very considerable trade, however fallen from its former splendour. Besides its silk manufactures, and the cotton cloth which takes its name, the Chinese highly esteem the paper, and the squares of ink which are made here. The pithy substance, in England vulgarly called *rice paper*, is likewise prepared in this neighbourhood from a leguminous plant called *Tung-tsaou*, which, like the rush, inhabits marshy places. When the pirate Koshinga ravaged the eastern coasts. he sailed easily up the mouth of the Keang to Nanking; and there is reason to suppose that, to a European fleet, it would be one of the most vulnerable parts of the empire, as the canal opens into the great river, a little below the city towards the sea. To blockade at once the mouth of the canal and of the Yangtse-keang, could scarcely fail to distress the empire, and especially Peking, which is fed by supplies from the southern provinces.

Nanking stands pretty nearly midway between Peking and Canton, the two most important extremes of China on the north and south. Notwithstanding the very considerable difference of climate which must be produced by no less than seventeen degrees of latitude, the general character of the cities and towns throughout the empire, and of the houses which they contain, is surprisingly uniform. The most striking features are the lowness of the houses, and the narrowness of the streets, which are usually paved with flag stones, and calculated only for the passage of people on foot, or of those who are carried in sedan chairs. The way is sometimes crossed by those triple gateways of an ornamental structure, which have been improperly styled triumphal *arches*, but which are of a square construction, and appear to have been usually erected to the memory of individuals celebrated for their talents or virtues. Another species of memorial, of the same kind, is a large stone slab, called *She-pae*, being about eight feet in height, two in breadth, and half a foot in thickness, covered with inscriptions, which record some honour conferred by the emperor, or the merit of some eminent person. These are always erected perpendicularly on the figure of a tortoise, of the same stone from which the slab is cut.

The portion of Canton in which the European factories are situated, being a mere suburb, does not contain any of the decorations above described; but the arrangement and architecture of the streets and shops is precisely the same as within the walls of the city. The shops are commonly quite open towards the street—that is, those appropriated to Chinese customers; for the few streets devoted to European trade are rather on a different plan, the shops being of a closer structure, and less exposed to external observation. The several streets are commonly devoted to distinct trades. There is *Carpenter*-street, or rather square, as it is carried round a

parallelogram; *Curiosity*-street (as the English call it) is devoted to the sale of antiques, real and factitious; and *Apothecary*-street is full of druggists' shops, the drawers in which are neatly arranged and lettered, but filled principally with simples. By the side of each shop is suspended from on high a huge ornamental label of wood, varnished and gilded, on which are inscribed the particular calling of the tenant, and the goods in which he deals. This label being hung like the sign of one of our inns, with its *edge* towards the street, and inscribed on both sides, can be read by all who approach the shop in either direction; and the vista of these numerous variegated sign boards, glittering with gold and varnish, gives to the better streets a very gay appearance.

The inscriptions in the shops are sometimes amusing, and at the same time highly characteristic of the keenness and industry of the people as traders. We have seen the following:—"Gossiping and long sitting injure business." "Former customers have inspired caution—no credit given." "A small stream always flowing." "Goods genuine, prices true." "Trade Circling like a wheel," &c. Either the police must be very good, or the populace tolerably abstemious; for some of the shops, which are pretty richly supplied, appear to be much exposed towards the street. But the inhabitants of each division generally combine into a system of watch and ward for the common protection; and during the night the streets are closed at each end by doors, which are guarded by the regular police.

The principal shops connected with European and American trade are those occupied by dealers in silks, lackered and carved ware, and all those smaller articles that are not restricted to the Hong merchants, who have the *exclusive* privilege of trading in tea, cotton, and other chief commodities. When the latter feel occasionally inclined to push their monopoly beyond its established limits, and to en-

croach on the sufficiently narrow trade of the shopmen, these usually combine for the purpose of opposing them with some chance of success. At the close of 1834, the Hong merchants showed a disposition to exercise the whole weight of their exclusive privileges against the English free trade, and even to *add* to them by depriving the shopmen of their accustomed dealings. A considerable ferment was created among the latter, which gave rise to a species of trades unions, composed of manufactories and dealers, who combined to plague the Hong merchants and petition the government, and succeeded, at length, in retaining such portion of the trade as they had before possessed.

The silk weavers and dealers are much in the habit of forming combinations to maintain the rules of their trade, and the prices of work as well as goods. The forfeit for violating the laws of the combination is, to be at the sole expense of a dramatic exhibition, which lasts for three days, and to pay half the value of the commodity sold contrary to rule, for the support of the tradesmen's hall, of which there is generally one in every principal city, belonging to each wealthy *corporation* of traders, if they may be so termed. The embassy of 1816 observed at Kan-chow-foo, a principal city of Keang-sy province, that by far the most considerable buildings were the commercial halls, belonging to the associated merchants and dealers. The principal room in the Exchange of the green-tea merchants (who pass by this on their way to Canton) was named *Hychun Tang*, or "Hyson hall." In the appropriation of these edifices, observes a private journal of the embassy, there is a singular combination of religious with commercial objects. They generally contain a temple of Budh, or some local divinity, and at the same time are used as an exchange, and house of entertainment and lodging, for the society of merchants to whom they belong.

The worshipful corporation of silkmen of Canton, having been of opinion in 1833 that some of their fraternity had been unfairly dealt with by an American, in a contract for silk piece goods, forthwith exhibited a rather amusing placard against him. "In conducting commercial transactions (said the paper) the Chinese and foreigners are generally the same; in buying and selling with justice and equity, there is no difference between them. When the goods are delivered, the money is immediately paid; there are no perverse difficulties made, nor cutting deductions inflicted. But there is now living in the Swedish factory, No. 2, an American devil, named *Hot*,* to whom a wolfish voracity has become nature. He monopolizes silks and various goods for the Americans. A gluttonous avarice fills his heart. There is long procrastination and money unpaid, —contracting for *much*, and then requiring *little*; with the concealed and villanous intention of picking and choosing. He would point at a *gem*, and call it a *stone*,† and then advance to administer the deadly potion of cutting down the price! And, again, when the time of payment arrived, he would enforce discounts. He scraped and peeled off from the trader both skin and fat. * * * * He, knowing that when the goods were once prepared there was none to take them but himself, forced his reduction upon us, and the Chinese brokers likewise servilely complied with his wish, joining and assisting in his wickedness; so that we have been torn by the wolf, and swallowed by the whale! We have become fish and flesh to him —our property is wasted without a return—all our hearts unite in detesting him; and therefore we have issued this song of our discontent. All the weavers of satin, silk, and crape publicly unite in the above declaration."

* Chinese corruption of the real name.
† Figuratively.

The greatest risk to which the houses and shops of Canton are exposed is that of fires, which in frequent instances are not the results of mere accident. The Chinese have very generally adopted the use of our engines, which they themselves occasionally manufacture sufficiently well to answer the purpose. The foolish notion of fatalism which prevails among the people makes them singularly careless as regards fire, and the frequent recurrence of accidents has no effect upon them, although the fearful conflagration of 1822 went far to destroy the whole city. When the dry northerly winds of the winter season have set in, the viceroy annually issues a notice to the people, calling on them to beware of the acts of incendiaries, who purposely set fire to buildings with a view to rob and plunder in the confusion; and that there is sufficient ground for the apprehension, seems proved by the fact, that fires break out most frequently at the season when they are most likely to spread, and most difficult to extinguish.

Vagabonds and beggars are very numerous in Canton, but not more so than in many large cities of Europe. In all cases of dislocation, fracture, or diseased limbs, the ignorance of anatomy, and abhorrence of amputation, render some of the cripples very pitiable, as well as disgusting objects. They have no levy of rates for the poor, but some small charitable institutions, which "are few in number and small in extent," according to the observation of the writer in a lately printed description of the city of Canton, published at that place. The following account of them is from the same little work:*—1. The "foundling hospital" stands without the walls of the city, on the east. It has accommodations for two or three hundred children, and is maintained at an annual expense of 2,522 taëls, or about 840*l*. 2. *Yangtse-yuen* is a retreat for poor aged and infirm, or blind people, who have

* Page 57

no friends to support them. It stands near the foundling hospital, and, like it, enjoys imperial patronage, receiving annually 5,100 taëls. These sums are chiefly derived from the foreign ships that bring rice to Canton. 3. *Ma-foong-yuen*, a hospital for lepers, is also on the east of the city. The number of patients in it exceeds 300, and these are said to be maintained on 300 taëls a year! The situation of lepers is peculiarly wretched in China, as they become outcasts from society, and from their families, from the first appearance of the disease. The object is probably to prevent its propagation.

The best maintenance of the poor, and the best provision for the due distribution of wealth, consists in the manner in which both law and custom enforce among them the claims of kindred. Public opinion considers it the duty of well-conditioned relatives to support or assist those who are allied to them by consanguinity, and the state refuses to maintain those who can work for themselves, or have friends able to relieve them. The attention bestowed by the Chinese on their deceased ancestors, and the prevalence of clanship, or extensive societies claiming a common descent, give to the lower orders some of that feeling which in England belongs only to persons of family, but which has characterized the Scotch people very generally. The natives of Canton province, and of Fokien, are the most remarkable in China for the extent to which this feeling of clanship is carried, and for the inconveniences to which it gives rise. In Fokien, two clans fell out in this manner in 1817. The name of one was *Tsae*, and of the other *Wâng*, and a gathering of each having taken place, they fought until many were killed, and a number of houses destroyed by fire. The police seized the most violent; but the worsted clan again attacked the other, and killed several of them, until the government called in the military to restore order. The Chinese

even carry this feeling *abroad* with them. Their skill as cultivators has occasioned some hundreds to be employed at St. Helena; and when Sir Hudson Lowe was governor of that island, he informed the writer that two clans from different provinces of China, having quarrelled in 1819, met together to have a battle royal. A sergeant's party turned out to quell the disturbance; but the stronger side, running up the side of one of the steep ravines, began to roll down stones, while the weaker one joined the soldiers, who were at length compelled to fire in their own defence, by which several Chinese were killed, and order soon restored.

But the fraternities which are most dreaded by the government of China are those secret associations, under various mysterious names, which combine for purposes either religious or political, or perhaps both together. Of the first description, the sect of the "Water lily" (a sacred plant) and that of the "Incense-burners," are both denounced in the seventh section of the Shing-yu; and with them is confounded the Roman Catholic worship under the same prohibition. The present weak state of the government renders it particularly jealous of all secret societies whatever, as well as cruel and unrelenting in punishing their leaders. But the chief object of its dread and persecution is the *San-ho-hoey*, or Triad Society, of which some description was given in 1823 by Dr. Milne. The name seems to imply that when *Heaven*, *earth*, and *man* combine to favour them, they shall succeed in subverting the present Tartar dynasty, and that, in the mean while, exertion is to be used to mature that event.

In October, 1828, a paper, of which the following is an exact translation, was found in the Protestant burialground at Macao, by a gentleman of the company's service, who, understanding the meaning of it, sent the production immediately to the mandarin of the district, with whom he happened to be acquainted

and who entreated that the matter might not be made public, as he should be severely punished for the mere discovery of such a seditious paper within his district:—

"Vast was the central nation—flourishing the heavenly dynasty,
A thousand regions sent tribute—ten thousand nations did homage;
But the Tartars obtained it by fraud—and this grudge can never be assuaged.
Enlist soldiers, procure horses—display aloft the flowery standard,
Raise troops, and seize weapons—let us exterminate the Manchow race."

Dr. Milne's account of the *Triad Society*, whose nature and objects he took some pains to investigate, is so curious as to deserve particular notice. The name of this association means, "the Society of the Three united," that is, of Heaven, Earth, and Man, which, according to the imperfect notions and expressions of Chinese philosophy, imply *the three departments of Nature*. There is a well-known Chinese cyclopedia, arranged under these three heads. In the reign of Keaking, about the commencement of the present century, the Triad Society, under another name, spread itself rapidly through the provinces, and had nearly succeeded in overturning the government. In 1803 its machinations were frustrated, and the principal leaders seized and put to death, the official reports stating to the emperor that "not a single member of that rebellious fraternity was left alive." But the fact was otherwise, for they still existed, and, with a view to secrecy, adopted the name which they at present bear

The objects of the association appear at first to have been allied to something like freemasonary, and to have aimed simply at mutual aid and assistance; but as the numbers increased, their views degenerated from the laudable ends of reciprocal benefit to violence and robbery, the overthrow of

government, and the acquisition of political power by the expulsion of the Tartar dynasty. In foreign colonies, as at Batavia, Sincapore, and Malacca, the real or pretended branches of the association exist, and their objects are mutual defence, as well as plunder and other dishonesty. They engage to defend each other from the attacks of police officers, and to assist members of their society in escaping from justice. If any one feels himself injured, the others take part in his quarrel and help him to revenge himself. Still the *professed* design is merely benevolent, as appears from their motto, which is a distich with this meaning :—

> "The blessings mutually share,
> The wo reciprocally bear."

The management of the combination is vested in three persons who are denominated *ko*, elder brethren, in the same manner that freemasons style each other "brothers." Of their internal discipline, Dr. Milne could obtain little information. The society's regulations are said to be written for greater security on cloth, which on any emergency may be thrown into a well, or otherwise concealed for a time.

The ceremony of initiation is said to take place at night. The oath of secrecy is taken before an idol, and a sum of money given to support the general expense. There is likewise a ceremony called *kuo-keaou*, "passing the bridge," which bridge is formed of swords, either laid between two tables, or else set up on the hilts and meeting at the points, in form of an arch. The persons who receive the oath take it under this bridge, and the *ye-ko*, or chief brother, reads the articles of the oath, to each of which an affirmative response is given by the new member, after which he cuts off the head of a cock, which is the usual form of a Chinese oath, intimating, "Thus perish all who divulge the secret." Some of the

marks by which they make themselves known to each other consist of mystical numbers, of which the chief is the number *three*. Certain motions of the fingers constitute a class of signs. To discover if one of the fraternity is in company, a brother will take up his teacup, or its cover, in a particular way with three fingers, and this will be answered by a corresponding sign. They have a common seal, consisting of a pentagonal figure, in which are inscribed certain characters in a sense understood only by the initiated.

Except in their dangerous or dishonest principles, the *San-ho-hoey* bear a considerable resemblance to the society of freemasons. They even pretend to carry their origin back to remote antiquity under another name. The members swear at their initiation to be fraternal and benevolent, which corresponds with the engagement of the freemasons. Another point of resemblance is in the ceremonies of initiation, in the oath and the solemnity of its administration. These are so striking as to merit the attention of such as deem the history of freemasonry worthy of investigation. Dr. Milne goes on to observe that the signs, particularly the use of the fingers, as far as is known or conjectured, appear to bear a resemblance. "Some have affirmed (says he) that the great secret of freemasonry consists in the words 'liberty and equality,' and if so, certainly the term *heung-te* (brethren) of the Triad Society may be explained as implying the same idea. Whether there exist anything in the shape of lodges in the San-ho-hoey, the writer has no means of ascertaining, but he believes the Chinese law is too rigorous against this body to admit of any; nor does there appear to be a partiality for the masonic employment." Branches of this association have spread over most of the islands and settlements in the Malay archipelago. They have sometimes impeded the execution of our laws at Sincapore against Chi

nese culprits, and the rapid increase of that portion of the population may hereafter render them dangerous, unless the most summary measures are adopted for their suppression.

The cautious policy of the government of China, ver on the watch to prevent the possibility of political associations under a religious exterior, allows no temples or other institutions of that kind to be erected that are not strictly orthodox, or which come not either within the Confucian doctrine or the tolerated sects of Fŏ and Taou. In 1824, the emperor issued this edict:—"To delude the people with unorthodox opinions is a great contravention of the laws. According to the report of the censor, a fane has again been erected to the superstition of Woo-tung, at a place three miles to the west of Soochow Foo. In the reign of Kâng-hy the fane was destroyed, and the idols burnt, and for a long series of years the superstition has been suppressed; but the sacrifices are now offered as before. The witches place a pretended confidence in the predictions of the spirits, and promise a fulfilment of hopes and desires." This was in fact an *oracle*, such as the weakness of human nature has given rise to in many other countries. The emperor goes on to say, "Let not the simple people be permitted to offer sacrifices or to associate with the votaries of the superstition. Let the magistrates issue instructions to the heads of families to exercise a rigid control over their dependants. Let the whole system of false worship, calculated only to delude the uninstructed populace, with its burning of incense and collection of subscriptions, be followed up, whenever it is detected, with severe punishment, in order that the public morals may be preserved, and the minds of men set right."

The description of the city of Canton, already referred to, gives a short account of the principal licensed temples, which may be considered as sam-

ples of what are to be found in most other cities of the empire. "The Kuâng-heaou-tse, or 'temple of resplendent filial duty,' is one of the largest, and stands within the walls near the northwest corner of the city. It is endowed with a considerable quantity of land for the support of its priests or inmates, who amount to two hundred in number, and is said to have been built as long ago as the period of the 'Three Kingdoms,' A. D. 250. Another temple, having attached to it a lofty pagoda, or minaret, is in fact a Mohammedan mosque, built (as the Chinese say) by *foreigners* in the Tâng dynasty, when the Arabs traded to Canton, and still fully tolerated. The Mohammedans amount at present to as many as 3,000, and are distinguished from the other inhabitants as persons who have no idols, and who will not eat swine's flesh."*

Besides less considerable ones, there is a Budhist establishment at Canton, about three quarters of a mile north of the foreign factories, in the suburb beyond the city walls, which contains a hundred priests, who are maintained on an annual revenue of 7,000 taëls. The temple, with its grounds, occupies some acres of land, and has several spacious halls, one of which has been lately built by a son of How-

* The Chinese observe of the Mohammedans that "the people of that nation worship Heaven alone, nor is there any other being or thing to which they pay divine honours. The rich (it is said) are liberal to the poor, and all persons from other parts of the country are received as friends, alluding probably to the sacredness of hospitality among the Arabs. Their funeral rites are simple; in Canton they are buried without coffins. The shell in which the deceased is carried to the tomb has a false bottom, which draws out, and lets the corpse fall into the grave. If it fall with its face towards heaven they regard the circumstance as an omen of future felicity; if the corpse turn with its face to the earth it is an unhappy sign. In the times of *Chin* and *Suy* (about the seventh century) they first entered China, and afterward came by sea to *Canton*. After the Yuen (Mongol) dynasty, they spread widely through the country, and now they abound everywhere."

qua, the Hong merchant. In one part of the temple is a large image of Budh, and in another an idol of *Kuan-yin*, the goddess who "regards the cries" of mortals, and assists them. She is worshipped chiefly by women. Another very large temple and monastery of the Budhist persuasion is to be seen on the opposite side of the river, nearly fronting the European factories; but a particular description and plan of this must be reserved to illustrate the sect of Fo, under the head of religions.

Among other temples, Canton, and indeed every principal city, contains one to the majesty and long life of the emperor, under the title of Wân-show Koong, or the "Hall of Ten Thousand Years;" the walls and furniture of this temple are yellow, and at the period when the emperor's birthday occurs in every year, the viceroy and all the principal officers of government, both civil and military, assemble there to pay him adoration. The solemnities practised are exactly the same as when he is present No chairs are allowed; but every one takes with him a cushion, on which he sits cross-legged upon the ground, as the embassy and mandarins did at the imperial feast at Tien-tsin, in 1816.*

Among the most respectable-looking buildings of Canton, inasmuch as the *fronts* at least are concerned, are the foreign factories, which occupy a very limited extent along the bank of the river in the southwestern suburb. The confined state of these, and their utter inadequacy to accommodate an increased number of traders, at the same time that the government refuses any increase of space, is a subject which must very soon be debated with the local authorities. These factories, together with a large portion of the suburb in which they are situated, are built on a muddy flat, which has been gained from the river, and they are consequently erected upon wooden piles, only just above high-water mark

* Vol. i., p. 299.

The heavy rains, during the summer of 1833 and 1834, produced overflowings of the river, which inundated the whole of the European factories to the height of several feet on their ground floors. Boats plied from door to door along the streets, and from one European residence to another; and a net was seen to be cast for fish in the midst of a Hong merchant's grounds! This was succeeded, as might have been expected, by sickness among the natives and Europeans; and there can be little doubt that if the inundations frequently recur, the factories, both from that cause and from their crowded state, will become uninhabitable by the large numbers who are prepared to try their fortunes at Canton. There is no remedy for these evils excepting permission to erect additional factories in a more healthy situation, and beyond the reach of the high tides, which never fail, during the rainy months, to inundate some portion of the space towards the river. The effect of this in a hot climate must of course be highly noxious.

The following account of the inundation in 1833 is from the Chinese Repository, published at Canton:—"On the 5th and 6th of September the tide was at the highest, being from four to five feet at the eastern gates of the city, which are above the factories. On the night of the 5th, the weather being calm and serene, the low murmuring of the current, as it rolled along, was distinctly audible in the foreign factories. * * * * * On the 7th, the water began gradually to abate, but it did not return to its ordinary level until after the 16th, when the spring tides had passed over. For upward of a week, during the continuance of the inundation, the current rushed past with such rapidity that all business with the shipping at Whampoa was entirely stopped; and even light gigs with European crews had the utmost difficulty in reaching Canton. To describe all that has come to our knowledge of the effects of th

awful visitation would far exceed our limits." The distress occasioned in the province had a visible effect on the commerce of the European ships, as it lessened at once the demand for imports and the supply of exports. The inundations, so unprecedented in former years, are said to have been occasioned by the neglect of the government, or its inability, to repair the extensive ravages in the dikes and embankments between Canton and the high country to the north and west; and, as the floods were repeated in 1834, there is reason to fear their recurrence may be expected.

It may, perhaps, seem incredible that the whole frontage of the buildings, in which foreigners of all nations are shut up together, for the prosecution of their trading business at Canton, does not exceed between seven and eight hundred feet. Each front, of which there are about thirteen, extends backward about a hundred and thirty yards into a long narrow lane or thoroughfare, on each side of which, as well as over arches that cross it, are the confined abodes of the English, French, Dutch, Americans, Parsees, and others. Many of these spend a large portion, if not the whole of their lives here, in the worship of Mammon without the sight of a female face, and with no recreation but the jingling of dollars, as they are perpetually being weighed or examined by the Chinese money-changers, in receipts or payments! Many years back, a considerable number of flags, as the Danish, Swedish, and Austrian, were hoisted in front of the factories, besides the English, Dutch, and American; but for the last quarter of a century these three, with the French tricolour, which was erected soon after the revolution of 1830, have been the only foreign ensigns seen there.

The European factories are called by the Chinese "the thirteen *Hongs*;" the word Hong being always used by them to denote a commercial establishment or warehouse. According to their custom, each

factory is distinguished either by some appellation denoting wealth and prosperity or by its flag. Thus the Austrian or imperial factory was called the "Twin-eagle Hong," a name which it retains to this day; the Danish, the "Yellow Flag Hong;" the company's, "the Hong that ensures tranquillity;" the American, "the Hong of extensive fountains;" and so on. To the east of all there is a narrow inlet from the river—a fetid ditch which serves to surround a portion of the city wall, as well as to drain that part of the town. This is crossed with a single arch, by a narrow street at the back of the factories that leads to the warehouses of the several Hong merchants, all of them communicating with the river by wooden or stone stairs, from which the tea and other merchandise are shipped.

The space occupied by the foreign factories is crossed by two well-known thoroughfares, one of them named China-street, and the other very appropriately dignified with the descriptive title of Hog-lane. The former is rather broader than the generality of Chinese streets, and contains the shops of the small dealers in carved and lackered ware, silks, and other articles in common demand by strangers. These are attracted to the several shops by inscriptions in the European character, which sometimes promise more than they perform; as when the dauber of truculent likenesses calls himself a "handsome face painter," &c. The shops, instead of being set out with the showy and sometimes expensive front of an English or French boutique, are closed in by gloomy black shutters, and very ill lit by a small skylight, or rather a hole in the roof. The inmates, instead of showing the civility and alacrity of shopkeepers in London or Paris, and anticipating the demands of their customers in the display of their goods, slowly, and sometimes sullenly, produce the articles from their cases and cupboards as they may

be asked for; so that shopping at Canton is far from being an agreeable pastime.

The alley called Hog-lane it is not easy to describe by any standard of comparison, as we believe that nothing so narrow or so filthy exists in a European town. The hovels by which it is lined are occupied by abandoned Chinese, who supply the poor ignorant sailors with spirits, medicated to their taste with stimulating or stupefying drugs; and when the wretched men have been reduced to a bestial state by these poisonous liquors, they are frequently set upon by their wily seducers, and robbed as well as beaten; until those sent in search of the sailors arrive, and carry them to their boat in this disgraceful condition. It was here that the affrays, which many years since so frequently led to homicides and discussions with the government, in general originated; until the company's authorities invested the senior commander of the fleet with the complete regulation and control of all boats, with their crews, at Canton. Powerful influence was, at the same time, used to put down the spirit-shops, or bind their owners by heavy pains and penalties to good behaviour.

Those who anciently witnessed the fearful tumults generated in Hog-lane, described them as something quite remarkable. A few straggling sailors, fresh from their ship, in passing a spirit-shop would be greeted by some Chinese with "How you do, Jack?" which would be immediately followed by a general exchange of similar brief and familiar appellatives, as Tom, Bill, and Ned, be the person addressed Christian or pagan. A pipe and repeated glasses of grog (all on the sailor's side) would immediately follow—with what might be called their ulterior consequences; for when the Chinese at length made their singulary unreasonable demand for payment, as, perhaps, a few *dollars* for what might be worth a few *pence*, Jack would have just sufficient

reason left to discern the extent of the enormity, without being at all in a condition to meet the case by a logical *reductio ad absurdum*. The place of reason would therefore be supplied by the fist, or by anything still harder that chanced to be grasped within it. The Chinese, not unprepared for the emergency, and in full possession of their wits, would discomfit by dint of numbers, and drive the sailors down the lane; but these would presently return with strong reinforcements; and so the tumult would grow, with successive charges and recharges, and wounds deep and broad, until several individuals on either side were maimed or killed.

The European commerce at Canton will be noticed specially hereafter. The amount of the native population of this city has been often discussed, but so little authentic information has ever been obtained on the subject, that it still remains a question wholly undecided. The sweeping calculations, however, by which some persons have endeavoured to make it amount to a million, do not seem to deserve much credit. As the whole circuit of the city has been compassed within two hours by persons on foot, it cannot exceed six or seven miles, and considering that the houses are not more than a single story in height, it seems difficult to imagine how such a monstrous number as a million can be stuffed within its precincts.

Indeed a large portion of the manufacturing business of the place is carried on, not upon the spot, but at a place called Foshan, about ten or twelve miles higher up the river. This stream, which is of such magnitude opposite the city as to float the largest junks, some of them equal to eight hundred or a thousand tons' burden, loses much of its size at a town called San-shuey Hien, which is not more than thirty-six miles above Canton, and is so named from the river there forming "three streams," or branches, one of which conducts from the north, the other from

the west, and the third, composed of these two united, leads down to the city. Nothing can exceed the beauty of the country along the sides of the river. The low country is interspersed with numerous well-wooded hills, planted chiefly with firs, which rise like islands above the cultivated flats by which they are surrounded. The banks of the stream are richly planted with fruit trees, consisting of the peach, the orange, and the plantain; and experience has shown that their roots, imbedded in the rich mud which has been chiefly gained from the river, and constantly fed with moisture by the tides, succeed better in that situation than in any other.

Not the least remarkable objects on the water, near Canton, are the immense rafts of fir which are constantly floated down to that place from the north and west. These are frequently many hundred yards in length, and consist often of systems of rafts lashed together, and extending to an incredible distance. They are guided down the river by means of long bamboo poles, managed by a few persons who erect their huts on the rafts, and make them their temporary abodes. A family of young children may frequently be seen sporting fearlessly, and in perfect security, on these huge plains of floating timber.

It must be observed that no inconsiderable portion of what may be considered as the population of Canton exists upon the river, in the multitudes that inhabit the junks, barges, and small boats. A very large majority of the latter (as remarked in the "description" of the city) are Tân-kea, or "egghouse" boats, from their shape resembling the longitudinal section of an egg. They are generally not more than ten or twelve feet long, about six broad, and so low that a person can scarcely stand up in them. Their covering consists of a bamboo or mat tilt, shaped like that of a wagon, which is very light, and serves tolerably as a defence against the weather Whole families live in these boats, and are consid-

ered as a distinct part of the population, being under a separate regulation, and not allowed to intermarry with those on shore.

But for the method already described of *sculling* the river craft, it would be physically impossible for such multitudes of vessels, large and small, to move about among each other without mutual impediment and confusion. The extreme order which reigned on the Canton river, notwithstanding its crowded state, particularly struck Captain Laplace, whom we have already quoted, and whose remarks on the subject are here translated, as the impressions of an individual altogether new to the place. "The greatest tranquillity, a perfect harmony, reigns amid this aquatic population. All these boats, of forms and dimensions so varied, move peaceably about. No fights, and rarely any quarrels. Each boat carrying either passengers or goods, and sculled by a female surrounded by her little ones, meets everywhere with a good-humoured accommodation, in consequence of which, notwithstanding the rapid current of the river, accidents are extremely rare. What a lesson for the lower orders, so brutal, so coarse, among nations who pretend, at the same time, to be the most civilized in the world! In China, the knowledge and the arts, which have given such an impulse to the industry of France and England, are much as they were in Europe above a century ago; but I repeat that the Chinese are very much our superiors in *true* civilization—in that which frees the majority of men from the brutality and ignorance which, among many European nations, place the lowest classes of society on a level with the most savage beasts." Monsieur Laplace is quite right; the lower classes of the Chinese people are better educated, or at least better trained, than in most other countries.

The long experience of European residents, who have been daily accustomed to sail or row upon the Canton river, either for business or pleasure, has

gone to corroborate the observations introduced in a former chapter, against the alleged *frequency* of the custom of female infanticide, the *existence* of which, to a limited extent, nobody pretends to deny. That the practice is disapproved by the Chinese themselves, will be best shown by the following extracts from a native work, which serve to prove, at the same time, that it is partly the result of the jealousies arising from the vicious system of legal concubinage. "The drowning of infants, though it be the work of cruel women, yet results from the will of the husband; if the husband be determined against drowning the infant, the woman can have nothing in her power. If the child be born of a *handmaid*, and the *wife* will not endure it, you may pass it over after the first month to some other family, and give it a name different from your own; by which means its life will be happily preserved.

"The nature of the tiger is most cruel, yet it knows the relation between parent and offspring. Shall man, who is the superior essence of all things, be surpassed by the tiger! I have heard that when female children are killed, the pain inflicted is beyond comparison—long suffering ere they die. Alas! the hearts of parents that can endure this! The disposition of daughters is most tender. They love their parents better than sons do. Many sons go from home; daughters cleave to their parents. Many sons disobey their parents; daughters are obedient. Sons have little feeling; daughters always mourn for their parents. Daughters love their virtuous husbands, and in many cases increase their parents' honour. The magistrates sometime wrote tablets in their praise; and the emperor graciously conferred presents on them. Some were made ladies of the palace; others wives of great men. If you preserve the lives of your daughters, a sure reward will be the consequence."

As far as general demoralization (the most natu-

ral of all causes) can tend to promote the practice of infanticide, Canton is considered by the Chinese themselves as the most licentious city in the whole empire, from the concurrent influence of its climate, and of the vast circulation of wealth produced by its foreign commerce. To be appointed to an official employment at that place, is emphatically called, "being *promoted* to Canton," so superior are the opportunities of enriching one's self in every way. The number of dissipated and idle vagabonds proves the comparative viciousness of this provincial metropolis; and a singular discovery, made in 1820, showed at once the character of the place, and the evil effects resulting from the practice of domestic slavery, as well as of legal concubinage. It was on that occasion found that a system of kidnapping male and female children had long prevailed, and been carried on to a great extent by an associated gang, and the following is an abstract of the circumstances which were detailed at the time in the "Chinese Gleaner."

The discovery was effected by the persevering efforts of a silk weaver, whose apprentice, the only son of a friend, had been kidnapped soon after entering on his service. "The man walked the streets of Canton in search of the lad, until by his daily wanderings and want of success he became half distracted. When all hope of finding the boy had nearly vanished, he came by mere accident on the object of his search, who being, according to the Chinese account, stupified by drugs, or otherwise, did not know his master. The weaver, however, conveyed him to his shop, and then to the lad's father; and after various remedies, with the practice of some superstitious ceremonies, the boy was restored to his senses and recollection. The case was immediately reported to the government, by whom the rendezvous of the kidnappers, ascertained from the lad's information, was surrounded, and all escape prevented. In the house were found six men

and three women, who had, for a long course of years, carried on a successful system of kidnapping children, and sending them to other provinces to be sold as domestic slaves. Several hundred had been thus stolen by them, and ten were actually found in the house. The gang were put to the torture, under which two died, and the remaining seven were chained together and paraded through the streets, receiving lashes from the youths whom they had kidnapped; after which they were either put to death or transported to Tartary.

There is a peculiar turbulence about the character of the people on the seacoast of this province, as well as the adjoining one of Fokien, which distinguishes them from other Chinese, and has frequently been noticed in the government proclamations, especially in regard to that spirit of *clanship* which is a frequent source of so much disorder. This difference may be perhaps attributed to the seafaring habits which distinguish them from the rest of the empire. The most notorious place for these excesses is the district of *Chaou-chow*, on the frontiers of Canton and Fokien, but still in the former province. One of the inhabitants some years since carried his appeal even to Peking against the magistrates, who either would not, or dared not restrain the outrages which resembled, in many respects, the horrors so frequently enacted by the Papists in Ireland. His kindred, having refused to assist two other clans in that neighbourhood to fight in their feuds, suffered the most shocking cruelties in consequence. Their houses were laid in ruins; several hundred acres of land seized and devastated; money plundered; temples of ancestors thrown down; graves dug up; and the water cut off from the rice fields. Many persons were killed; more still were maimed and crippled for life; and, notwithstanding the large rewards offered for the apprehension of the leaders, such was the organization which bound them together, that they escaped unpunished.

The immense fleets of pirates who have often continued for years to infest the southern coasts, and who at length have been put down only by a compromise on the part of the government, may partly account for the existence of a maritime population in these two provinces, distinguished by a ferocity of character so different from the peaceable mildness of the other Chinese. To repress these, as well as to provide a safeguard against the European traders, is probably the object of the unusually large amount of Chinese troops and of war junks which are kept up in the Canton province. At a short distance below the foreign factories is the dockyard, which seems continually engaged in building or repairing the vessels of the emperor's squadron, whose inefficiency against European ships the Chinese never pretend to dispute. The sovereign of China himself not long since issued a paper, in which he inveighed against "the falling off" of his navy, as he declared had been proved on several occasions. "There is the *name* of going to sea," he observed, "but not the *reality*. Cases of piracy are continually occurring, and even barbarian barks anchor in our inner seas." Alluding to the European vessels on the eastern coasts.

The land force retained about the city of Canton has been estimated at 7,000; but a considerable portion of these are a mere municipal police, and not regular soldiers, though the same term *ping*, in contradistinction to the common people, is applied to all alike. One of the viceroys of the province, subsequently to the ill conduct of the Canton troops in the operations against the independent mountaineers, published a curious summary of the duties of a Chinese soldier in warfare: "Whoever runs away is to be decapitated. When an enemy advances, he who shrinks, or whispers to his comrade, shall suffer death. On commencing a fight, powder, shot, and arrows must not be thrown away

at a distance, but reserved for closer action, as the want of them, when needed, is like waiting to be slain with the hands tied. When a mandarin is wounded or taken, the men must make every effort to save him, and if they neglect this they are to be put to death. The soldier who bravely kills an enemy shall be rewarded, but he who *lies* concerning his own merits, or usurps those of others, shall be decapitated. He who hears the drum and does not advance, or who hears the gong and does not retire, shall suffer the same punishment. Strict adherance to the severities of martial law is the only way to make brave men of cowards."

It may be reasonably doubted whether the above rules are the best that could be devised for such a purpose, and the proof is that the Chinese generally effect the objects of force by trickery and compromise. But after this enumeration of the chief duties of a common soldier, it may be as well to give, from another quarter, the virtues of a good general in the selection of his men; some of which, it must be remarked, are rather of a *speculative* than of a practical nature. "The covetous he appoints to guard his treasure; the uncorrupt to dispense his rewards; the benevolent to accept submission; the discriminating and astute to be envoys; the scheming to divine the enemy's plans; the timid to guard the gate; the brave to force the enemy; the strong to seize an important pass; the alert to gain intelligence; the *deaf* to keep a look out; and the *blind* to listen. As a good carpenter throws away no blocks, so a good general has no men unemployed. Each is selected according to his capacity; but favour, (it is added,) and interest, and secret influence subvert the order of things, sending the blind to look out, and the deaf to listen." It has never yet, by any chance, happened to Chinese soldiers to be engaged with European troops on land; but by the admission of the natives themselves, they have always failed

entirely, and always must fail against ships; and it can scarcely be doubted that they would be as easily discomfited in the other instance, did any European power ever find it worth while to make the trial.

The Chinese government has expended very large sums in the vain endeavour to render the entrance of the Canton river impassable to European ships of war. The *Alceste* frigate forced her way, in 1816, almost without opposition; but since that period additional forts have been built, and all the guns that could be collected have been placed in them with something like a determination to succeed in the object. When Lord Napier, in September, 1834, despatched a requisition to his majesty's ships *Imogene* and *Andromache* to proceed to Whampoa and join the merchant shipping at their anchorage, it met of course with a prompt compliance, and a fair experiment of their strength and means was afforded to the batteries at the Boca Tigris, as they had been long preparing themselves. A comparison of the observations made on board the two frigates gave the following results as to the armament of the forts :—

	Embrasures	Mounted Guns.
Starboard hand, Old Ananghoy fort . . .	16	16
" New ditto	40	40
Larboard hand, Island battery (double tier)	82	39
" Tiger Island battery . .	32	18
Total guns		113

In the above account are not included two smaller forts, which may be passed out of gunshot range; and as the notes were made after the affair was over, it is probable that many of the guns in the larger batteries had been dismounted by our shot.

At half-past twelve, P.M. on Sunday, the 7th September, his majesty's ships *Imogene* and *Andromache*, two eight-and-twenty gun frigates, got under

way to proceed through the *Boca,* under the command of Captain Blackwood. A stir was immediately perceived among the war junks in Anson's Bay, and at the forts nearest to the place of anchorage. All hands, on the Chinese side, commenced by firing blank cartridge; but this was soon followed up by shot, which, from the actual distance at the time, fell far short of the ships. The junks, about a dozen in number, fired away, and made a terrible din; but in the mean time retired as far as they could within the shoaly recesses of Anson's Bay to the right, the admiral leading in gallant style towards the shore. As his majesty's ships neared the entrance and got within range of the principal batteries, the wind, which had been right aft at starting, suddenly shifted to the north, and blew down the strait against us. It now became a working passage, through a narrow channel about a quarter of a mile in breadth; but the tide was running flood, and strong in our favour. The *Imogene* at once stood towards the island battery on one tack, while the *Andromache*, Captain Chads, C. B., approached Ananghoy on the other.

The *Imogene* waited until the double-tier fort had fired several shots, and when the last one had nearly reached her, it was answered by two guns in quick succession; the *Andromache*, in the mean while, returning the fire of the Ananghoy battery with several well-aimed shot, some of which plunged into the parapet with prodigious effect, while others passed clean through the embrasures. It was observed that as long as our fire lasted, it silenced that of the forts; but as it soon appeared that any cessation on the part of the frigates produced a renewal from the batteries, it became necessary to discontinue the humane and often repeated order, "to cease firing on the main deck." The action was most brisk on getting into the middle of the channel; but the Chinese fired like men in a panic, aiming very wild, or let-

ting fly as the ships arrived nearly at the line of fire for each gun as it was laid. There could have been very little reloading or training of the guns after the first few shots. The best firing was from the double-tier battery on the larboard hand. Several of the shot from thence struck the *Imogene*, one of them coming through the side of the quarter deck, knocking down a seaman with the splinters, and grazing the fore part of the mainmast. A great many more passed between the hammocks and the quarter deck awning.

The whole of the slow-working passage occupied nearly an hour and three quarters. It was necessary, of course, that a considerable portion of the crews should be at the ropes in tacking ship, at the same time that the guns on both sides must be worked as they came to bear. The frequent tacks so often exposed the frigates to be raked by the batteries, that the little or no damage experienced from the enemy sufficiently proved their want of steadiness and skill. The round-stern armaments of both the ships proved extremely useful, and served to keep the forts in check. Soon after effecting the passage of the Boca, the wind fell dead calm, and obliged the frigates to come to anchor below Tiger Island, which is some miles above the entrance.

Perpetual calms or baffling airs kept us at anchor until the afternoon of Tuesday the ninth, when we weighed to pass Tiger Island, through a deep but narrow channel close under the walls of the battery. In the interim the Chinese were observed to be very busy in adding to their means of annoyance; a number of boats bringing additional supplies of guns, while a parade of some hundreds of matchlock-men took place on the rampart. As the ships got under way, with a light fair breeze, our larboard guns were duly trained and prepared. The battery reserved its fire much longer than was expected: but

the moment the first shot had passed the bows of the *Imogene*, leading ship, a most tremendous and well-directed cannonade was opened by her, which the *Andromache* took up as soon as she could bear upon the fort. The ships steered close by the fort, not more than two hundred yards from the wall, the parapet overlooking them. The crews gave a loud cheer just as they got in front of the battery, and the effect was evident in slackening the fire of the Chinese. One of their large shot came through the *Imogene's* side and killed the captain of the forecastle, while three others were wounded with splinters, but not severely. The *Andromache* had a seaman killed on the main deck, and three or four wounded also. So many of our thirty-two pound shot entered the embrasures, or shattered the stone parapet, that the Chinese loss must have been considerable. This battery was very severely punished, for the ships made good use of their time, and had learned from experience to be less sparing of their shot. Some buildings within the fort were a heap of ruins.

Considering that the batteries, between them, had at least 113 mounted guns, they ought certainly to have sunk the ships; instead of which the whole damage done in both days was two men killed, half a dozen wounded, and a few ropes shot away. Captain Blackwood received an official letter from the admiralty, commending the skilful and gallant manner in which he conducted the ships through; and the Emperor of China exclaimed in his edict—"It seems that all the forts are erected in vain; they cannot beat back two barbarian ships It is ridiculous—detestable!"*

* The above account is nearly as it was sent, at the time, to he Canton newspaper. Two prints have been since published by Ackerman, correctly representing the ships engaged.

CHAPTER XII.

RELIGION.—CONFUCIANS.

Confucius.—Character of his Ethics.—Four Books.—Five Canonical Works.—Book of Songs.—Shooking, a Fragment of Ancient History.—Book of Rites—Historical Work by Confucius.—*Ye-king*, a mystical Work.—Resembles the Occult Numbers of Pythagoras.—Theory of Creation.—Objects of State Worship.—Sacrifices.—A Supreme Being recognised by the Emperor.

It has been observed that the very errors of the human mind form a part of its history; and it is on this ground that the different religious or philosophic persuasions into which the vast population of China has been divided, claim a portion of our attention; while it may be added, of the doctrines of Confucius in particular, that they form the basis of the whole system of government. These last, perhaps, owe some of their better traits to the circumstance of having originated during a period when the country was divided into a number of small states, nominally dependant on one head, but each ruled by its own laws; a condition more favourable to liberty and good government than its subsequent union under one absolute master.

Confucius, as his name has been Latinized by the Jesuits, (being really Koong-foo-tse,) was born about 550 B. C., in the state Loo, within the district now called Keo-fow Hien, just to the eastward of the great canal in Shantung province. It will be observed, from the date, that he was a contemporary of Pythagoras. From his earliest age Confucius is said to have been indifferent to the ordinary amusements of youth, and devoted to grave and serious pursuits. Being the son of a statesman, the chief

minister of his native kingdom, he employed himself entirely on moral and political science, and neither investigated any of the branches of natural knowledge, nor meddled with the common superstitions of his country. His doctrines, therefore, constitute rather a system of philosophy in the department of morals and polities, than any particular religious persuasion.

It was the chief endeavour of the sage to correct the vices which had crept into the state, and to restore the influence of those maxims which had been derived from the *ancient kings*, as Yaou, Shun, and others celebrated in history or tradition. That he was sincere, and that his professed love of reform was not a mere steppingstone to his personal ambition, or an instrument to serve his private ends, was proved by the readiness with which he abandoned the station to which his talents had raised him, when he found that his counsels were unavailing, and his influence inadequate to the restoration of order. That portion of modern China which lies to the north of the great Keang was then divided into a commonwealth of states, of which the native kingdom of Confucius formed only a constituent member; and through these various countries he journeyed in a condition of simplicity and comparative indigence, devoting himself to the instruction of all ranks, and to the propagation of his precepts of virtue and social order. Such was the success of his endeavours, and the weight of his influential character and good example, that he is said to have reckoned, at length, as many as three thousand disciples or proselytes, of whom seventy-two were more particularly distinguished by their devotion to their master, and the practice of his precepts. He was now sought after by the rulers of the several states, and employed in high offices tending to mature his knowledge and experience; but at length retired to the company of his chosen disciples, to

study philosophy, and compose or compile those celebrated works which have handed down his reputation to after ages, and become the sacred books of China.

Among the moral doctrines of this great oriental teacher might be noticed some which have obtained the universal assent of mankind, and which cannot be surpassed in excellence as rules of conduct. He taught men "to treat others according to the treatment which they themselves would desire at their hands," and "to guard their secret *thoughts*," as the sources and origin of action. In common, however, with every other scheme of philosophy merely human, there is much to condemn in the principles of the Chinese sage. He carried his inculcation of filial duty to so absurd and mischievous an extent, as to enjoin it on a son "not to live under the same heaven" with the slayer of his father; or, in other words, to exercise the *lex taliones* and put him to death. This pushing to extremes of the paternal claim has (as we have before hinted) been the constant device of Chinese statesmen and rulers; the tendency being to strenghten the authority of the *emperor*, founded as it is in the rights of a father over his children. Confucius was renowned for his unpretending humility and modesty; but this portion of his mantle has not descended on his disciples of the present day; for if distinguished occasionally by some of the virtues of *stoics*, they resemble that sect still more in the high tone of self-sufficiency of pride which marks the conduct of the Confucians to all who have not the honour to profess the state religion of China.

By the marriage which he had contracted at the early age of nineteen, the sage had but one son, who died before his father, leaving, however, a grandson to Confucius, who inherited the talents and virtues of his progenitor, and distinguished himself in high station. The founder of another sect calling

themselves *Taous-sze*, or "Doctors of reason," (who I we shall hereafter describe,) was contemporary with the great philosopher, and perhaps has been indebted, in some measure, for the consideration in which he is held, to the attention bestowed on him by Confucius, who is said to have repaired to his dwelling for the purpose of conferring with him, and exploring his tenets. After completing his last work, the *Chun-tsieu*, which was a history of the times in which he had lived, Confucius died at the age of seventy-three, much regretted by the rulers of the states whose government and morals he had contributed mainly to meliorate. Time has but added to the reputation which he left behind him; and he is now, at the distance of more than two thousand years, held in universal veneration throughout China by persons of all sects and persuasions, with shrines and temples erected to his worship.

Dr. Morrison, in the first part of his dictionary, has quoted various particulars relating to the life of the sage from several Chinese works. Confucius is said to have been more than nine cubits in height; and, whatever may have been the cubit of those days, he was universally called "the tall man." Various prodigies, as in other instances, were the forerunners of the birth of this extraordinary person. On the eve of his appearance upon earth, two dragons encircled the house, and celestial music sounded in the ears of his mother. When he was born, this inscription appeared on his breast—"The maker of a rule for settling the world." The pedigree of Confucius is traced back in a summary manner to the mythological monarch *Hoang-ty*, who is said to have lived more than two thousand years before Christ. The morality of his family, however, notwithstanding this high descent, and even of himself, was in one respect open to censure, for he divorced his legal wife, and the example was followed by his son and grandson.

When he had concluded his travels through the various states, and retired to his native kingdom, which was at the age of thirty, disciples began to flock to him in great numbers. "At fifteen," says the sage in the *Lun-yu*, "I commenced my application to wisdom, and at thirty my resolution was immoveably fixed." The close of his life was far from tranquil, and he was either employed in the affairs or implicated in the disputes of the petty states of his day. A quarrel, in which the sovereign of Loo was defeated, obliged Confucius to flee northward to the kingdom Tsy, situated in the modern gulf of Pechely. Between his fiftieth and seventieth years he was absent from home fourteen years together When seventy years of age, his favourite disciple Yenhoey died. Confucius being greatly concerned for the continuance and propagation of his doctrines, and having entertained great hopes of this person, was inconsolable for his loss, and wept bitterly, exclaiming, "Heaven has destroyed, Heaven has destroyed me!" In his seventy-third year, a few days before his death, he moved about, leaning on his staff, and sighed as he exclaimed—

> "The mountain is crumbling,
> The strong beam is yielding,
> The sage is withering like a plant."

He observed to a disciple that the empire had long been in a state of anarchy, and mentioned a dream of the previous night, which he regarded as the presage of his own departure; and so it came to pass, for after seven days of sickness he died. The 18th day of the second moon is kept by the Chinese as the anniversary of their sage's death. In the Hân dynasty, long subsequent to his existence, Confucius was dignified with the highest title of honour, *Koong*; and he was subsequently styled the Sovereign Teacher. The Ming, or Chinese dynasty, which succeeded the Mongols, called him "the most holy

teacher of ancient times," a title which the present Tartar family has continued.

Though only a single descendant (his grandson) survived Confucius, the succession has continued through sixty-seven or sixty-eight generations to the present day, in the very district where their great ancestor was born. Various honours and privileges have always distinguished the family. The heads have enjoyed the rank of nobility; and in the time of Kâng-hy the total number of descendants amounted to eleven thousand males. In every city, down to those of the third order, styled Hien, there is a temple dedicated to Confucius. The emperor himself, the magistrates, and all the learned of the land do him service. The philosopher in his lifetime sometimes spoke as if persuaded that he had received a special commission to instruct the world. In a moment of apparent danger he exclaimed, "If Heaven is resolved that my doctrine shall not fail, the men of Kuâng can do nothing to me."

Dr. Morrison justly observes that "Confucius was engaged in politics all his life; and even his ethics dwell chiefly on those social duties which have a political bearing. A family is the prototype of his nation or empire, and he lays at the bottom of his system, not the visionary notions (which have no existence in nature) of *independence* and *equality*, but principles of *dependence* and *subordination*—as of children to parents, the younger to the elder, and so on. These principles are perpetually inculcated in the Confucian writings, as well as imbodied in solemn ceremonials, and in apparently trivial forms of mere etiquette. It is probably this feature of his doctrines that has made him such a favourite with all the governments of China for many centuries past, and down to this day. These principles and these forms are early instilled into young minds, and form the basis of their moral sentiment: the elucidation and enforcement of these principles and forms

are the business of students who aspire to be magistrates or statesmen, and of the wealthy who desire nominal rank in the country; and it is, in all likelihood, owing chiefly to the influence of these principles on the national mind and conscience, that China holds together the largest associated population in the world." It is certain that no pagan philosopher or teacher has influenced a larger, if so large, a portion of the whole human race, or met with more unalloyed veneration. Whatever the other opinions or faith of a Chinese may be, he takes good care to treat Confucius with respect; and, as we have before observed that Confucianism is rather a philosophy than a religion, it can scarcely be said to come into direct collision with religious persuasions. The Catholics got on very well until they meddled with the civil and social institutions of China.

A summary view of the original works or compilations which have come down from the age of Confucius and his disciples, will perhaps enable us to form some judgment respecting that school of philosophy and literature of which he was the head, and which constitutes at this day the standard of Chinese orthodoxy. The classical or sacred works consist in all of nine; that is to say, the "Four Books," and the "Five Canonical Works." In the course of a regular education, the former of these are the first studied and committed to memory, being subsequently followed up by the others; and a complete knowledge of the whole of them, as well as of the standard notes and criticisms by which they are elucidated, is an indispensable condition to the attainment of the higher grades of literary and official rank. The original text of these works is comprised within a very moderate compass; but the numerous commentaries, which from time to time have been added, contribute to swell the whole to a formidable bulk. The art of printing, however, which gives the Chinese such an advantage over

other Asiatic nations, together with the extreme cheapness of paper, has contributed to multiply the copies *ad infinitum*, and to bring these and most other books of the country within the reach of almost everybody.

1. The first of the Four Books is the *Ta-heo*, which has been correctly rendered "the school of adults" by the Jesuits, meaning literally the *study of grown persons*. A later work, which has been named in contradistinction *Scaou-heo*, "the study of youth," commonly precedes the other in education. The Ta-heo proceeds to show that in the knowledge and government of *one's self* the economy and government of a family must originate; and going on thence to extend the principle of domestic rule to the government of a province, it deduces from this last the rules and maxims which should prevail in the ordering of the whole empire. The first section of the work is ascribed to Confucius himself, and the remaining ten to his principal disciple. The pithy and condensed style of these celebrated bequests of antiquity may be inferred from the fact that the *text* of this work (however it may be swelled by commentaries) contains less than two thousand words; and its contents are briefly summed up as tending "to the improvement of one's self; the regulation of a family; the government of a state, and the rule of an empire." The end and aim of the work is evidently political; and in this instance, as in others, the philosopher and statesman of China commences with *morals* as the foundation of *politics*; with the conduct of an individual father in his family, as the prototype of a sovereign's sway over his people. In the sixth section of this work "the beauty of virtue" is inculcated somewhat in the manner of the stoics, and its practice recommended as a species of enjoyment. There is some wisdom shown in pointing out the importance and utility of rectifying "the motives of action." The following sentence, too, is remark-

able: "He who gains the hearts of the people secures the throne; and he who loses the people's hearts loses the throne." There is every reason to believe that the recollection of this has tended to soften in practice the absolute theory of the Chinese government, and contributed to its general quiet and stability.

A very detailed analysis of their classics cannot be attempted in a work of this popular description, and we therefore conclude our notice of the Ta-heo by quoting a maxim from the tenth section, which might be recommended to the notice of European financiers: "Let those who produce revenue be many, and those who consume it few; let the producers have every facility, and let the consumers practise economy; thus there will constantly be a sufficiency of revenue," and (it might have been added) no national debts. There is a fair translation of the Ta-heo, with the text, in Dr. Marshman's Clavis Sinica; and M. Pauthier has lately published a Latin version at Paris.

2. The title of the second of the Four Books is *Choong-yoong*, which means the "infallible medium," or the *juste milieu*. It is an application of the Greek maxim—

ἡ δε μεσοτης εν πασιν ασφαλεστερα,

that "the middle is in all things the safest course." Whatever vicissitudes a man may undergo, he is taught to be always equal and moderate; never haughty or elate in an exalted station, nor base in an humble one. It must not, however, be supposed that the thirty-three sections into which this work is divided are always of a practical nature; for they contain much that is extremely obscure, and sometimes almost unintelligible. The work serves generally to expound the ideas of the Chinese respecting the nature of human virtue. They commonly divide mankind into classes: 1. The *Shing*, perfect or

inspired, who are wise or virtuous independently of instruction—the saints of China. 2. The *Hien*, good or moral, who become so by the aid of study and application. 3. The *Yu*, vicious or worthless, who degenerate into that state in spite of teaching. The Chinese consider that the nature of man is originally pure and inclined to virtue, and that it becomes vitiated only by the force of evil example, and by being soiled with what they call "the dust of the world." The old Greek poet, Hesiod, has four lines which define with surprising exactness the above triplicate classification of mankind. He says that—

"He is indeed the BEST of men who of himself is wise in all things:
Though he is GOOD who follows a good instructer:
But he who is neither wise of himself, nor in listening to another,
Remains mindful of advice—this is the WORTHLESS man."

The best translation of the *Choong-yoong* is that by Abel Rémusat, late professor of Chinese at Paris; but his version has been properly censured for being rather too verbal, and for too close an adherence to the mere letter of the text, in a work which, of all others in that language, requires to be illustrated with some degree of freedom in order to make it intelligible.

3. The *Lun-yu*, the conversations or sayings of Confucius recorded by his disciples, together with the most remarkable actions of his life, is in all respects a complete Chinese *Boswell*. There is the same submissive reverence towards the great master of letters and morals, and the same display of self-devotion in erecting the fabric of his greatness. The conversational style is preserved alike throughout, as may be seen from these examples:—

LUN-YU.

A disciple inquired, 'What must the sage do to

deserve renown?" *Confucius* asked, "What do you call renown?" The other replied, "To be known among the nations, and at home." *Confucius* said, "That is merely notoriety, and not true renown. Now this consists in straightforward and honest sincerity, in the love of justice, in the knowledge of mankind, and in humility," &c.

BOSWELL.

Talking of Goldsmith, he said, "Sir, he is so much afraid of being unnoticed, that he often talks merely lest you should forget that he is in the company." *Boswell:* "Yes, he stands forward." *Johnson:* "True, sir, but if a man is to stand forward, he should wish to do it, not in an awkward posture, not in rags, not so that he shall only be exposed to ridicule," &c.

The advantage, however, to our taste, is much on the side of the modern philosopher. The work consists in all of twenty chapters, divided into two equal parts—the *Shang* and *Hea*, (upper and lower,) first and second. The maxims turn chiefly upon private or public conduct, morals or politics. The demeanour and habits of the sage are diligently recorded. "He was mild, yet firm; majestic, though not harsh; grave, yet agreeable." He seems to have been fond of a simple and retired life. "The virtues of country people," he observes, "are beautiful: he who in selecting a residence refuses to dwell among them cannot be considered wise." The following is a specimen of the style of the Lun-yu. Being asked by a disciple to define the man of superior virtue, Confucius replied, "He has neither sorrow nor fear." "Does that alone constitute the character?" observed the other, surprised. "If a man," rejoined the sage, "searches within, and finds naught wrong, need he have either sorrow or fear?" This is nothing more than the sentiment of Horace:—

"Nil conscire sibi, nullâ pallescere culpâ."

The Chinese philosopher is stated to have been an enthusiastic lover of music, and to have done something to improve it. Certain it is, that whatever was said or done by him, is made a rule of action at the present day, even to his personal demeanour. It has been observed before that many of the provisions of the penal code are founded upon his maxims; and one instance in particular was noticed, wherein it is enacted, "that children and near relations, or dependants, shall not be punishable for concealing the faults of those with whom they dwell." The object of this seems to be the strengthening of kindred and domestic ties, founded on that precept of Confucius, "The father may conceal the faults of his son, and the son those of his father—virtue consists with this." The most remarkable passage of the Four Books, and the best maxim of the Chinese teacher, is the following:—Being asked if any *one word* could express the conduct most fitting for one's whole life, he replied, "Will not the word *Shoo* serve?"—and he explains this by "Do unto others as you would they should do unto you." This word must be admitted to be one of comprehensive import.

"There are three things," said Confucius, "to beware of through life. When a man is young, let him beware of his appetites; when middle aged, of his passions; and, when old, of covetousness especially." The following passage deserves notice:—"How can a mean man serve his prince?" asked the sage. "When out of office his sole object is to *attain* it; and when he has attained it, his only anxiety is to *keep* it. In his unprincipled dread of losing his place, he will readily go all lengths."* The extreme conciseness of the language in which these books are written, makes it sometimes very difficult to render their true meaning into English, except by

* Chap. xvii., sec. 15.

some degree of paraphrase and circumlocution; and hence the apparent absurdities that have been justly ridiculed in some of the Protestant missionary translations. Those honest but injudicious men seemed to imagine that a verbal rendering was the one best calculated to convey the import of the original, whereas the very reverse is often the fact. The language of China is so much altered in point of copiousness since the "Four Books" were composed, that the native editions consist chiefly of commentaries and amplifications, which are found to be absolutely necessary for elucidating the text. This, it must be admitted, may occasionally lead the rulers of China to interpret their great oracle in the manner best calculated to suit their own purposes, and such was the opinion of a correspondent of ours, who had spent half his life at Peking:—"Confucius et toujours grave, sentencieux, laconique, mystérieux—les lettrés y trouvent tout ce qu'ils veuillent."

4. Ranking next to Confucius (*similis aut secundus*) is the celebrated Mencius, so called by the Jesuits, from his Chinese name Meng-tse. He lived about a century after his great predecessor, whose doctrines he still further illustrated and promoted, and left behind him the *fourth* of the sacred books, bearing his own name. His birth was, as usual, said to be attended with prodigies, but the less fabulous part of the legend attributes the virtues and learning of Mencius to the excellent precepts and example which he received from his mother. Such was her care of the boy, that she three times removed her dwelling on account of some fault in the neighbourhood. Satisfied at length on this point, she sent her son to school, while she, a poor widow, remained at home to spin and weave for a subsistence. Not pleased with his progress, she learned, on inquiry, that he was wayward and idle, upon which she rent the web which she was weaving asunder, partly from vexation, and partly as a figurative expression

of what she wished him to remember; for when the affrighted boy asked the reason of her conduct, she made him understand that without diligence and effort, his attending school would be as useless to his progress in learning, as her beginning a web, and destroying it when half done, would be to the procuring of food and clothing. He took the hint, addressed himself to learning with all diligence, and became a sage, second only to Confucius himself. One anecdote of the mother of Mencius deserves notice. The boy on seeing some animals killed, asked her what was going to be done with them. She in jest said, "They are killed to feed you;" but, on recollecting herself, she repented of this, because it might teach the boy to lie; so she bought some of the meat and gave it to him, that the fact might agree with what she had uttered. The Chinese hold her up as the pattern of mothers.

The first book of Mencius opens with a conversation between him and the king of the state called Leang. The latter had usurped the title, and when he invited the worthies and philosophers of the day to his court, Mencius went among the rest. On his entering, the king accosted him, saying, "I suppose you come to increase the gains of my country?" To which he replied, "What need is there to speak of gain? benevolence and justice are all in all;" and he illustrated this by showing that if a spirit of selfish avarice went abroad among all ranks, from the prince downward, mutual strife and anarchy must be the result; upon which the king, as if convinced, reiterated his words, and said, "Benevolence and justice are all in all." Mencius lived to the age of eighty-four, and his memory remained without any particular marks of honour, until an emperor of the Soong dynasty, about A.D. 1085, reared a temple to him in Shantong province, where his remains had been interred. He then obtained a niche in the temple of Confucius. Kea-tsing, an emperor of the

Ming dynasty, which expelled the Mongols, established the memory of the sage in its ancient honours, and made one of his real or supposed descendants in the *fifty-sixth* generation a member of the Hânlin college, which title was to remain hereditary in the family for the performance of the requisite sacrifices. "If," as Dr. Morrison* observes, "the persons who now profess to be the posterity of Confucius and Mencius be really so, their families are probably the most ancient in the world." It would certainly be difficult to find even a Welsh pedigree to compete with them.

The contents of the book of Mencius exceed the aggregate of the other three, and the main object of the work is to inculcate that great principle of Confucius—philanthropic government. To our taste it is by far the best of the whole; and while it must be confessed to contain a great deal that is obscure, and perhaps worthless, there are passages in it which would not disgrace the productions of more modern and enlightened times. It is curious to find, in the text book of an absolute government, sentences which savour much more of the rights of humanity, and a regard to the general good, than could have been expected. Nothing indeed is more remarkable, in the Four Books, than the freedom with which Confucius and Mencius give their advice to kings. An instance occurs in the sixth chapter of the work under consideration. In reply to a proposition from the sovereign, that certain severe or unjust taxes should be only lightened for this year, and abolished the next, Mencius replies, "This is like a man who should steal his neighbour's goods, and on being censured should answer, 'I will take so much less every month, and stop next year.' If you know the thing to be unjust, give it up instantly."

"The hearts of the people" are stated to be the

* Dictionary, part i., page 732.

only legitimate foundations of empire, or of permanent rule.* "If when with an equal strength (it is said) you invade a country, the people come to welcome you with supplies, can this be on any other account than because you are about to rescue them from fire and water?† but if you deepen the water and increase the fire, they will turn from you." Were any European power ever disposed to gain an influence in China by expelling the Tartars, this would be the language to hold; and as a secret association actually exists, whose object is the restoration of the Chinese dynasty, this seems to be the mode in which the end might most easily be attained. In fact, the Tartars are at all times extremely jealous of any intimate connection arising between their Chinese subjects and foreigners; and this lies at the bottom of their rigid system of exclusion. It was *prior* to the Tartar conquest that Europeans had access to various commercial marts on the eastern coast, and only *since* that event that they have been shut out in the most effectual manner; nor does it appear likely at present that the trade will very soon extend beyond Canton.

"He who subdues men by force," says Mencius, "is a tyrant; he who subdues them by philanthropy is a king. Those who subduc by force do not subdue the heart; but those who subdue men by virtue gain the hearts of the subdued, and their submission is sincere." He at the same time explains very well the necessity for governments, as well as for the inequalities in the conditions of different orders of society. It may be questioned whether the argument could be better put than in his fourth book,

* "This obvious truth has been much insisted on in every period of Chinese history; and, being more or less acted on, has meliorated the condition of the people, who, though not formally represented in any legislative assembly, have always found other means of making their voice heard."—*Morrison.*

† Explained in the commentary as *tyranny.*

where the illustration he makes use of demonstrates, at the same time, the advantages resulting from the *division of labour*. Let it be remembered that this was all written more than two thousand years ago. In reply to the objection that one portion of the community is obliged to produce food for the other,* "Does the farmer," asked Mencius, "weave the cloth or make the cap which he wears?—No; he gives grain in exchange. Why does he not make them himself?—It would injure his farming. Does he make his own cooking vessels, or iron implements for farming?—No; he gives grain in barter for them: the labour of the mechanic and that of the husbandman ought not to be united. Then," says Mencius, "are the government of the empire and the business of the farmer the only employments that *may* be united? There are employments proper to men of superior station, as well as to those in inferior conditions. Hence it has been observed, some labour with their minds, and some with their bodies. Those who labour with their minds *rule*, and those who labour with their bodies are *ruled*." This is exactly Pope's line—

"And those who think, still govern those who toil."

The commentary appended to the foregoing in the Chinese work proceeds to add—"The mutual benefit derived by these different classes from each other's exertions, resembles the advantage that results to the farmer and mechanic from the exchange of their respective produce. Hence it is proved that the exemption of some from manual labour is beneficial to the whole community." It appears from the book of Mencius, that the Chinese have always considered the ground as the original source of all wealth, and the principal subject of taxation. Agri-

* Chap. v., sec. 4.

culture is called the *root*, and manufactures and trade the *branches*, and hence the higher honours and attention bestowed on the former.

After the Four Books come the Five Canonical works, called *King*, of each of which Confucius was either the author or compiler. 1. The *Shy-king*, or Book of Sacred Songs, has been described in the Royal Asiatic Transactions,* as a collection of about three hundred short poems selected by Confucius himself, after rejecting the licentious pieces, which were numerous. The earliest poetry of China, like that of all other nations, appears to have consisted in songs and odes, intended occasionally to be accompanied by music. They have the following notion of the nature of poetical language. "The human feelings, when excited, become imbodied in words; when words fail to express them, sighs or inarticulate tones succeed; when these are inadequate to do justice to feeling, then recourse is had to song." The Book of Songs is divided into four portions, of which the first, the largest and most interesting, is called *Kuo-foong*, "the manners of different states;" that is, of the states into which a portion of the present empire was then divided. These had all of them a kind of feudal dependence on one sovereign, who, in order to possess himself of the best means of estimating the character and sentiments of the various people more or less under his sway, was furnished with the songs and odes most popular in each of them. This agrees in a singular manner with the following remark of a writer in the Spectator:†—"I have heard," says he, "that a minister of state, in the reign of Queen Elizabeth, had all manner of books and ballads brought to him of what kind soever, and took great notice how much they took with the people; upon which he would,

* Vol. ii., *On the Poetry of the Chinese.*
† No. 502.

and certainly might, very well judge of their present disposition, and of "the most proper way of applying them according to his own purposes." The bulk of these curious vestiges of antiquity in China do not rise beyond the most primitive simplicity; and their style and language, without the minute commentary that accompanies them, would not be always intelligible at the present day. This commentary, however, explains and elucidates their meaning, and by means of the historical associations which it serves to convey, renders these songs the favourite study of the better informed at the present remote period. Every well-educated Chinese has the most celebrated pieces by heart, and there are constant allusions to them in modern poetry and writings of all kinds.

The second and third parts of the ancient Book of Songs are said to have been composed for the purpose of being sung or recited on state occasions; they treat of the great and virtuous actions of heroes and sages, or express their sentiments. The fourth and last portion of the ancient poetical canon is called *Soong*, that is, eulogies or panegyrics on the ancestors of the dynasty Chow, then filling the throne, and on the great personages of antiquity. They appear to have been a species of hymn, sung before the emperor when he sacrificed as *pontifex maximus* (always the peculiar office of Chinese sovereigns) in the temples of Heaven and Earth, or in the hall of his ancestors. Whatever may be the real character of the Shy-king on the score of poetical merit, it is at least curious as having been compiled more than twenty centuries prior to our time, and some portion of it composed at a still earlier period.*

2. The *Shoo-king*, which is the next of the Five Canonical works, is considered by the Chinese as

* Royal Asiatic Transactions, vol. ii., p. 422

imperfect, and accordingly obscure in many parts, only fifty-eight sections remaining out of one hundred. The rest were perhaps destroyed in the great bonfire of books, by which the first universal emperor, Chy-hoâng-ty, made himself so celebrated. The Shoo-king is a history of the deliberations between the two emperors Yaou and Shun, and those persons whom Confucius styles the *ancient kings*, (rulers of petty nations or states,) whose maxims are quoted by him as the models of perfection. Their notions of good government are founded on certain principles, sufficiently good in themselves and "which being observed, there is order; if abandoned, there is anarchy." "It is vain to expect," they add, "that good government can proceed from vicious minds." Here again one is occasionally surprised (as in the precepts of Confucius and Mencius themselves) to meet with maxims which could be hardly anticipated as the groundwork of a mere Asiatic despotism. They rather prove, in fact, that if administered and preserved in strict accordance with its theory, the government of China is based in a great measure on public opinion.* When the people (in the Shoo-king) rise against the tyranny of him with whom the *Hea* dynasty closed, they are justified by the maxim, that "the *people's hearts* and *Heaven's decree* are the same;" which is nothing else, in fact, than *vox populi, vox Dei.* We have before had occasion to notice the account contained in the Shoo-king of a general inundation, (by some identified with the universal deluge,) whose waters were drained off by the exertions of the great *Yu*, in the course, it is said, of nine years. This, together with other circumstances attending the Chinese account of the event, leads rather to the inference that it was only

* A philosopher of some celebrity left behind him these three maxims regarding government:—"First, to choose proper men; secondly, to consult the wishes of the people; thirdly, to act according to the times."

an aggravation of those fearful inundations to which the extensive country watered by the Yellow river (descending at once from the hills of Tartary into an immense alluvial plain) is even *now* constantly liable. There is, indeed, fair ground for concluding that the course of that great stream near the sea has, at some remote period, been changed, and that it must once have emptied itself into the gulf of Pechely, north of the Shantung promontory.*

3. The Book of Rites, *Ly-king*, which is the next in order, may be considered as the foundation of the present state of Chinese manners, and one of the causes of their uniform unchangeableness. Exterior forms were highly estimated by the earliest teachers of the country, on the ground of their being calculated to soften men's manners, and restrain their natural proneness to excess and violence. They observed, that the tempers and dispositions of all being different, the *Ly* (or rules of propriety in relation to external conduct) became necessary in order to harmonize such opposite characters, and reconcile their differences. Hence it has been the constant endeavour of Chinese moralists and rulers to stifle everything like passion in its birth, and to reduce all to a tranquil dead level. The ceremonial usages of the country are commonly estimated to amount to *three thousand*, as prescribed in the ritual; and one of the Six Boards or tribunals at Peking, called *Ly-poo*,

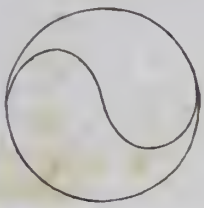
* In the book of Mencius it is stated (chap. v., sec. 4) that Yu, in the course of eight years, removed the obstacles which choked several rivers, so that they flowed into the sea, and that he opened a vent for others into the Keang. Mr. Collie, the Protestant missionary who translated the Four Books, remarks with apparent reason, that (according to this account) the country had been overflowed from the creation of the world down to the period in question, and that the water was put into proper channels by human efforts. "These circumstances," he adds, "deserve the consideration of such persons as have supposed that the Chinese writers alluded to the universal deluge.

is especially charged with the guardianship and interpretation of these important matters, which really form a portion of the religion of the Chinese.

4. The *Chun-tsieu*, a history of his own times, and of those which immediately preceded them, was the last, and perhaps, strictly speaking, the only *original* work of Confucius. Its object appears to have been to afford warnings and examples to the rulers of the country, reproving their misgovernment and inculcating the maxims of the "ancient kings" for their guidance. This work commences about 750 years before our era, and concludes with the events which immediately preceded the death of the philosopher. Having been commenced in spring and concluded in autumn, the *Chun-tsieu* derives its name from this circumstance; and such are the fanciful names frequently given by the Chinese to their literary productions. We believe that this work has never yet been wholly translated into any European language. The opinion given by Père Prèmare of the Chinese histories in general is perhaps the real reason why they do not bear the labour or expense of a detailed version. *In ultimo gradu pono historicos, non quòd male scribunt, sed quia non admodum curo scire facta quæ referunt*—"I rank their historians the last in order, not on account of any intrinsic inferiority, but because I do not take the same interest in the facts which they relate."

5. The last that we have to notice of the Canonical works is the *Ye-king*, which is a mystical exposition of what some consider as a very ancient theory of creation, and of the *changes* that are perpetually occurring in nature, whence the name of the work. The system may doubtless be extremely ancient in its origin, but little can be gathered from the *Ye-king*, the most oracular of performances; and this philosophy has been greatly added to in later times by the commentator *Choo-tsze*, and others

who flourished in the eleventh century of our era, when the learned dynasty of Soong governed China. The arithmetic diagrams of Fo-hy, as we find them in the Ye-king, bear some resemblance to the mystical numbers of the Greek philosopher Pythagoras, who, although he enlarged the bounds of science, appears to have allowed his speculations to be perverted by dreams of mysterious virtue in certain numbers and combinations. In the same way the Chinese make use in divination, and various other branches of their mock philosophy, of the *Pa-Kua* or eight diagrams of Fo-hy, which, if they mean anything, may be supposed to represent a system of binary arithmetic. Chinese philosophers speak of the origin of all created things, or the *premier principe materiel*, (as it has been called in French translations,) under the name of *Tae-keih*. This is represented in their books by a figure, which is thus formed.



On the semidiameter of a given circle describe a semicircle, and on the remaining semidiameter, but on the other side, describe another semicircle. The whole figure represents the *Tae-keih*, and the two divided portions, formed by the curved line, typify what are called the *Yang* and *Yin*; in respect to which this Chinese mystery bears a singular parallel to that extraordinary fiction of Egyptian mythology —the supposed intervention of a masculo-feminine

principle in the development of the *mundane egg*.* The *Tae-keih* is said to have produced the *Yang* and *Yin*, the active and passive, or male and female principle, and these last to have produced all things. The heaven they call *Yang*, the earth *Yin*, the sun is *Yang*, the Moon *Yin*, and in the same manner the supposed analogy is carried throughout all nature. One might sometimes be led by their definitions of *Tae-keih*, to suppose it an intelligent being; but the general drift of the system is plainly material, as it does not discriminate between the creature and the creator. This dogma of materialism, however ancient it may be in its first origin, became especially cultivated, or, according to some, *originated* in China during the *Soong* dynasty, which preceded the Mongol Tartar conquest. The learning and science of the Chinese, such as it was, being then much in vogue, some celebrated commentators on the ancient books appeared about that time, the most famous of whom was the *Choo-tsze* before named. At length, under Yoong-lo of the *Ming* dynasty, and in the fourteenth century, a joint work was composed, by name *Singly-ta-tseuen*, or a complete exposition of nature, in which the mystery of the Tae-keih was fully treated of. Choo-tsze thus expressed himself: "The celestial principle was male, the terrestial female: all animate and inanimate nature may be distinguished into masculine and feminine: even vegetable pro-

* This idea seems to have been very general. "In a mysterious passage of the Yajur-veda, Brahma is spoken of, after his emanation from the golden egg, as experiencing fear at being alone in the universe: he therefore willed the existence of another, and instantly he became masculo-feminine. The two sexes thus existing in one god were immediately, by another act of volition, divided in twain, and became man and wife. This tradition seems to have found its way into Greece: for the Androgyne of Plato is but another version of this Oriental mythus."—*The Hindoos*, vol. i., p. 166.

ductions are male and female, as, for instance, there is female *hemp*, and male and female *bamboo*. Nothing exists independent of the *yin* and *yang*." Although the Chinese do not characterize the sexes of plants, and arrange them systematically as we do after Linnæus, they use the above phraseology in regard to them; nor do they confine it to the vegetable and animal creation only, but extend the same to every part of nature.* *Numbers* themselves have their genders: a *unit* and every odd number are male, *two* and every even number female.

The above might, with no great impropriety, be styled "a sexual system of the universe." They maintain that when from the union of the *Yang* and *Yin* all existences, both animate and inanimate, had been produced, the sexual principle was conveyed to, and became inherent in all of them. Thus heaven, the sun, day, &c., are considered of the male gender; earth, the moon, night, &c., of the female. This notion pervades every department of knowledge in China. It exists in their theories of anatomy and medicine, and is constantly referred to on every subject. The chief divinities worshipped by the emperor, as high priest of the state religion, are heaven and earth, which in this sense appear to answer in some degree to ουρανος and γη, in the cosmogony of the Greeks.

Of *Tien*, or heaven, they sometimes speak as of the Supreme Being, pervading the universe, and awarding moral retribution: and it is in the same sense that the emperor is styled "the son of Heaven." At other times they apply the term to the visible sky only. Heaven stands at the head of their *moral* as well as *physical* system, and most of the attributes of the Deity are referred to it. The common people colloquially apply to it a term of respect, equivalent to *venerable father*, or *Lord*; and

* Chinese Gleaner, vol. ii, p. 144

Choo-tsze himself says on one occasion, that "Heaven means God." *Ty*, the earth, is called by the Chinese *mother*, in the same way that *Tien*, heaven, is styled *father*, and between these two, all sublunary things are said to have been produced.

The combinations of double and single lines, contained in the Ye-king, and denominated *Kua*, may be seen depicted on the circles of the Chinese mariner's compass. Of these, Dr. Morrison observed that they "are called the signs, forms, or species of all things in nature, and seem somewhat like the intelligible numbers of Pythagoras, as the monad, duad, and so forth, of which nothing either certain or important is now known. Some have spoken of these numbers as 'the archetype of the world;' others, in language much more like that of the Chinese, call them 'the symbolical representations of the first principles and forms in nature.' But what is meant in either case it is not easy to determine. Whatever use Pythagoras made of his 'intelligible numbers,' the only intelligible use that is made of them in China is for the purposes of imposture, in fortunetelling or divination."

The same writer remarked that, with the Confucians of China, the gods appeared to hold by no means an undivided supremacy, the saints or sages (*shing-jin*) seeming to be of at least equal importance. "Confucius admitted that he did not understand much respecting the gods, and therefore he preferred being silent on the subject: and Choo-foo-tsze (or Choo-tsze) affirmed that sufficient knowledge was not possessed to say positively that they existed; but he saw no difficulty in omitting the subject altogether. Though the sages of China did not claim for themselves an equality with heaven, they yet talk of each other in a way that sounds like blasphemy. Heaven and earth, they say, produced man, but the work was incomplete: men were to be taught the principles of reason, which heaven and

earth could not do; the work of the sages was equally great, and therefore heaven, earth, and the sages form a triad of powers, equal among themselves."* The Chinese division of human knowledge, it may be remarked, is into *heaven*, *earth*, and *man*. "The *Joo-keaou*, or sect of the learned," adds Dr. Morrison, "which is so miserably deficient respecting the Deity, is also entirely silent respecting the immortality of the soul, as well as future rewards and punishments. Virtue is rewarded, and vice punished in the individuals, or in their posterity on earth; but of a separate state of existence they do not speak."†

Among the sages of China, none perhaps holds a much higher rank in general estimation than the celebrated commentator Choo-foo-tsze. In the embassy of 1816, we visited the spot which had been consecrated by the abode of this person, and which, from the natural beauties of the situation, possesses attractions of no ordinary kind. On the west of the Poyang lake, near the city *Nan-kang-foo*, is a range of mountains, consisting principally of mica slate, in which are imbedded great quantities of garnets, the whole in a state of rapid disintegration. The mica existed in such abundance, that our entire pathway; as the sun shone upon it, was in a blaze of light. At no great distance the Chinese were working large quarries of fine granite. Near the bottom of a beautiful cascade, which fell in a crystal column from a great height, was the com-

* "Then," says Confucius, "the sage is united with heaven and earth, so as to form a triad. To be united with heaven and earth, means to stand equal with heaven and earth. These are the actions of the man who is by nature perfect, and who needs not to acquire perfection by study." It may be observed, that the emperors of China are principally included in this list.

† Their philosophy makes man consist of a *hing*, figure, or visible body, and *ky*, spirit, or animating principle. While the union continues the body remains sensible, and the separation is death.

mencement of a most romantic valley, in which, at a little distance from the foot of the mountains, was the spot formerly inhabited by the philosopher: it was called "the Vale of the White Deer," from a circumstance in his history. The most remarkable object, in the temple there erected, was a figure of Confucius, of whom the complexion was represented as quite black. On the tablet below his feet was inscribed, "The altar of the deified Confucius, the most holy teacher of ancient times." In one of the halls, at present used as a schoolroom for young students, were five large tablets, inscribed with the most noted precepts of the sage. There were also the two following inscriptions on either side of the entrance: "Since the time of Choo-tsze, learning has flowed as from an authentic fount." "By studying in the retirement of the mountains and waterfalls, man returns to the primitive goodness of his nature."

That the Chinese believe in the existence of an *innate moral sense*, seems implied in this passage from Mencius: "If you remark the natural dispositions, you may see that they are towards virtue; hence I say that man's nature is virtuous. All men have (originally) compassionate hearts; all men have hearts that feel ashamed of vice; all have hearts disposed to show reverence and respect; and all men have hearts that can discriminate between right and wrong. A compassionate heart implies benevolence; one ashamed of vice, rectitude; one which respects and reveres, a sense of propriety;* and one that clearly distinguishes right from wrong, wisdom. Now the principles of benevolence, rectitude, propriety, and wisdom are not infused into us from without; we certainly possess them of ourselves." It will be remarked that these notions are quite opposed to our own doctrine of original sin and human depravity.

* *Ly*, the word applied to their ceremonies

This notice of the state religion of China may be concluded by the following sketch of the principal objects of worship, and other points connected with it, abstracted from the detailed account contained in the Chinese Repository, a work printed at Canton.* The state worship is divided into three classes:— first, the *Ta-sze*, or great sacrifices; secondly, the *Choong-sze*, or medium sacrifices; and lastly, the *Seaou-sze*, or lesser sacrifices. Under the first head are worshipped the heaven and the earth. In this manner they would seem to adore the material and visible heaven, as contrasted with the earth; but they, at the same time, appear to consider that there exists an animating *intelligence* which presides over the world, rewarding virtue and punishing vice. *Tien* and *Shang-ty*, "the supreme ruler," appear always to be synonymous in the Shoo-king. Equal with the above, and like them restricted to the worship of the emperor and his court, is the great temple of imperial ancestors. If the Chinese sovereigns are thus deified, we may recollect similar examples of madness and folly in the Roman emperors, one of whom, still further to outrage the common sense of mankind, made his horse a consul; and even the "conquering son of Ammon" himself was not exempt from those disorders of the brain which infest the giddy heights of human prosperity. In China, however, this extravagance is rather the part of a *system*, calculated by design to work upon the feelings and opinions of the multitude, than the mere result of individual caprice and vanity.

The objects of worship entitled to the "Medium sacrifices" are (among others) the gods of the land and grain. The former are generally represented by a rude stone, placed on an altar with matches of incense burning before it, which is commonly seen in every street and corner. The sun and moon,

* Vol. iii, p. 49.

otherwise called the "Great light" and the "Evening light," come under this head. The rest are various gods, genii, sages, and others, the inventors of agriculture, manufactures, and useful arts. The god of letters stands principal among these. The "Lesser sacrifices" include a still larger class, among which is the ancient patron of the healing art, together with innumerable spirits of deceased statesmen, eminent scholars, martyrs to virtue, &c. The principal phenomena of nature are likewise worshipped, as the clouds, the rain, wind, and thunder, each of which has its presiding god. The *five mountains*, the *four seas*, are rather figurative than exact expressions for the land and the ocean in general. Like the Romans, they worship their military flags and banners: and *Kuan-ty*, a deified warrior of ancient times, much honoured by the military, is especially adored by the present dynasty for his supposed assistance. Their right being that of conquest they properly worship the god of war. *Loong-wang*, the dragon king, who represents rivers and the watery element, receives much sacrifice from those who have charge of the Yellow river and grand canal, both of which so frequently burst their banks; and his temples were constantly recurring during the progress of the embassies through the country.

Among others of the same class of gods is "the queen of heaven," *Tien-how*,* concerning whom the legend says, that she was a native of the province of Fokien, and distinguished in early life for her devotion and celibacy. She became deified during the thirteenth century, under the Soong dynasty, and having originated in a maritime province, she is the peculiar patroness of seafaring people, who erect altars and temples to her on shore, and implore her protection on the water. She is supposed to have

* Worshipped also by the Budhists, see p. 92.

the control of the weather; and in seasons of severe drought the government issues proclamations, commanding a general fast and abstinence from animal food: the local magistrate, in his official capacity, goes to the temples and remains fasting and praying for successive days and nights, supplicating for rain. In no country are the vicissitudes of the seasons more irregular, or the incoveniences resulting from them more severe, than in some parts of China.

"That the material universe is the object of worship appears not only from the names of those several parts which have been given above, but also from other circumstances. Thus the imperial high priest, when he worships heaven, wears robes of an azure colour, in allusion to the sky. When he worships the earth his robes are yellow, to represent the clay of this earthly sphere. When the sun is the object his dress is red: and for the moon he wears a pale white. The kings, (*wang*,) nobles, and crowd of official hierophants wear their court dresses. The altar of sacrifice to heaven is round, to represent the sky; that on which the sacrifices to earth are laid is square, but whether for a similar reason is not stated. The priests of the Chinese state religion, subordinate to the emperor himself as *pontifex maximus*, are the kings, nobles, statesmen, and the crowd of civil and military officers. The *joo-keaou*, or philosophic sect, monopolize both the civil and sacred functions At the grand state worship of nature, neither priests nor women are admitted; and it is only when the especial sacrifice to the patroness of *silk* takes place, that the empress herself, and the several grades of female rank at Peking, may take a part.

"It is required of the Chinese hierophants that they be free from any recent legal crime, and not in mourning for the dead. For the first order of sacrifices they are required to prepare themselves by ablutions, a change of garments, a vow, and a fast of three days. During this time they must occupy a

clean chamber, and abstain—1. from judging criminals; 2. from being present at a feast; 3. from listening to music; 4. from cohabitation with women; 5. from intercourse with the sick; 6. from mourning for the dead; 7. from wine; 8. from eating onions or garlic; for," says the annotator, "sickness and death defile, while banqueting and feasting dissipate the mind, and unfit it for holding communion with the gods."

The victims sacrificed consist of oxen, sheep, and pigs; and the other offerings are principally silks.* It is required that the victims be whole and sound, and a black colour is preferred. The times of sacrifice are specified thus: Those to heaven are offered at the winter solstice; those to earth at the summer solstice; and the others at regularly appointed periods. The punishment annexed to the neglect of due preparation, imperfect victims, &c., is either forfeiture of salary for a month or longer, or a specified number of blows with the bamboo, which may be commuted for the payment of a very small sum of money, according to the *number of blows* adjudged to the delinquent; which, as in other cases throughout the penal code, may often be considered rather as a *measure of the offence* than as a specification of the *real penalty* inflicted. The case is far different if the common people presume to arrogate the right of worshipping heaven, for they are punished in such cases with eighty blows, and even with strangulation.

Notwithstanding the general aspect of materialism that pertains to the Chinese philosophy, it is difficult to peruse their sentiments regarding *Tien* (heaven) without the persuasion that they ascribe to it most of the attributes of a Supreme governing intelligence. The work above quoted contains, in an-

* These, as well as the flesh of the sacrifices, are probably divided among the worshippers eventually.

other place, the translation of the prayer of the reigning emperor, Taou-kuâng, on the occasion of a long drought with which the whole country had been afflicted in the year 1832.* The following extract will show at once the responsibility which attaches to the conduct and administration of the emperor, and the notions of a Supreme Being associated with the Chinese ideas of *Tien*:—"I, the minister of heaven," says the emperor, "am placed over mankind, and made responsible for keeping the world in order, and tranquillizing the people. Unable as I am to sleep or eat with composure, scorched with grief, and trembling with anxiety, still no genial and copious showers have yet descended. * * * * * * I ask myself whether, in sacrifical services, I have been remiss; whether pride and prodigality have had a place in my heart, springing up there unobserved; whether from length of time I have become careless in the affairs of government; whether I have uttered irreverent words, and deserved reprehension; whether perfect equity has been attained in conferring rewards and inflicting punishments; whether, in raising mausoleums and laying out gardens, I have distressed the people and wasted property; whether, in the appointment of officers, I have failed to obtain fit persons, and thereby rendered government vexatious to the people; whether the oppressed have found no means of appeal; whether the largesses conferred on the afflicted southern provinces were properly applied, or the people left to die in the ditches. * * * * * * Prostrate, I beg imperial Heaven to pardon my ignorance and dulness, and to grant me self-renovation; for myriads of innocent people are involved by me, a single man. My sins are so numerous that it is hopeless to escape their consequences. Summer is past, and autumn arrived—to wait longer is impossible. Pros

* Chinese Repository, vol. i., p. 236

trate, I implore imperial Heaven to grant a gracious deliverance," &c.

It was the opinion of some among the Jesuits in China, that the better portion of the learned in that country had not given way to the material and atheistical system current during the Soong dynasty, but adhered strictly to the ancient religion, in which a Supreme and creative intelligence was acknowledged under the title of *Tien*, or *Shang-ty*.* The Confucian philosophers consisted, according to them, of two sects. First, of those who disregarded the modern commentators and philosophists, and retained the same notions regarding the Creator of the universe that had been handed down from remote antiquity. Secondly, of those who puzzle themselves with the speculations of Choo-tsze and his school, as they appear in the work before mentioned, and endeavour to explain the phenomena of nature by the operation of material causes. Others of the Romish missionaries were persuaded that *all* the Chinese learned were no better than atheists, and that notwithstanding the express declaration of the Emperor *Kang-hy*, in his communications with the pope, wherein he averred that it was *not* to the visible and material heaven that he sacrificed, but to the true Creator of the universe, no faith could be placed in their explanations. We have before remarked that the Romish fathers, however much they may have extolled the wealth, civilization, and resources of China, have generally viewed the moral and religious character of the people in a somewhat prejudiced light; and the commercial adventurers from Europe, confined in their communications with the people to the neighbourhoods of seaports, unable commonly to gain correct information from books, and treated by the government as barbarous intruders, have been sufficiently predisposed to give way to unfavourable impressions.

* The Supreme Ruler.

CHAPTER XIII.

RELIGION—BUDHISM.

Three systems of Religion, or Philosophy.—History of Budhism.—Resemblance to Popery.—Temple and Monastery near Canton.—Nine-storied Pagodas.—Chinese Objections to Budhism.—Debtor and Creditor account in Religion.—Pagan and Romish Practices.—Divinity of the Virgin.—Budhists and Papists.—Paradise and Hell of Fo.—Doctrines of Budhism.—Worship of Fo in China.

When a Chinese is asked how many systems of philosophic or religious belief exist in his country he answers, *Three*—namely, *Yu*, the doctrine of Confucius, already noticed; *Fo*, or Budhism; and the sect of *Taou*, or "Rationalists." It must not, however, be inferred that these three hold an *equal rank* in general estimation. Confucianism is the orthodoxy, or state religion of China; and the other two, though tolerated as long as they do not come into competition with the first, have been rather discredited than encouraged by the government. "First (it is observed in the Sacred Instructions) is the honourable doctrine of the *Yu*, and then those of *Fo* and *Taou*. Respecting these latter, Choo-tsze has said, the doctrine of Fo regards neither heaven nor earth, nor the four regions. Its only object is the establishment of its sect, and the unanimity of its members. The doctrine of Taou consults nothing more than individual enjoyment and preservation."

The religion of Fo,* or, as it is pronounced at Canton, *Fut'h*, is that of Bud'h, in the precise shape

* This has been constantly confounded with the name of the ancient emperor, *Fo-hy*.

which that superstition has assumed throughout Thibet, Siam, Cochin-china, Ava, Tartary, and Japan. The extensive dissemination of Budhism in countries foreign to India, its original birthplace, must necessarily be ascribed in a great measure to the rancorous persecution it experienced from the Brahmins, whose hatred to this heresy gave rise, as soon as they became the predominant sect, to the most cruel treatment of the *reformers*, for such the Budhists appear at first to have been. "About one thousand years before the Christian era, an extraordinary man appeared in India, who laboured with unceasing assiduity, and not without success, to reform the popular superstitions and destroy the influence of the Brahmins. This was Budha, whom the Brahmins themselves regarded as an avater of Vishnu. The efforts of Budha were exerted to bring back the religion of his country to its original purity. He was of royal descent, but chose an ascetic life, and embraced the most abstruse system of philosophy prevalent in India. Many princes, among others the celebrated Vikramâditya, who reigned in the century that preceded the commencement of our era adopted the faith of Budha, and, as far as their influence extended, obliterated the religion of the Brahmins and the system of castes. It is certain, however, that the learned adherents of the Brahminical religion did not remain silent spectators of what they deemed (*or at least called*) the triumph of atheism. They contended with their equally learned opponent, and this dispute, as is manifest by the tendency of many of the works still read by the Hindoos, called forth all the talents of both sides; but here, as in innumerable other instances, the arm of power prevailed, and, as long as the reigning monarchs were Budhists, the Brahmins were obliged to confine themselves to verbal contentions. At length, about the beginning of the sixth century of our era, an exterminating persecution of the Bud-

hists began, which was instigated chiefly by Cumavila Bhatta, a fierce antagonist of their doctrine, and a reputed writer on Brahminical theology. This persecution terminated in almost entirely expelling the followers of the Budhist religion from Hindoostan; but it has doubtless contributed to its propogation in those neighbouring countries into which it had previously been introduced, through the inter course of commerce and travel."*

The above is the Indian history of Budhism. According to the Chinese, it was introduced into their empire about sixty-five years after the commencement of our era, during the reign of Ming-ty of the Hân dynasty. That monarch, considering a certain saying of Confucius to be prophetic of some saint to be discovered in the west, sent emissaries to seek him out. On reaching India, they discovered the sect of the Budhists, and brought back some of them with their idols and books to China. The tradition is, that Budha was both king and priest in a country of the west, with a queen whom he made a divinity: that he was obliged to abdicate his power and seek a secluded retreat for twelve years, after which he taught the dogma of the metempsychosis, or transmigration of souls, making that the vehicle of a system of rewards and punishments hereafter. He is said ultimately to have regained his power, and to have departed this life at an advanced age, being transformed at once into the god Fo, or Budha. It is a common saying of his disciples, that "Fo is one person, but has three forms," which are represented by three distinct gilded images, called the "Three precious, or pure Budhas." The mother of the god is said to have dreamed that she had swallowed an elephant, whence the veneration for elephants in Siam and Pegu. Budha's character as a reformer is indicated by the Chinese legend, that he aimed at

* The Hindoos, vol. i., p. 175.

instructing men "to amend their conduct and practise virtue."

The five principal precepts, or rather interdicts, of Budhism must be understood as being addressed to the priests alone, or to those who devote themselves to the god. They are the following:—1. Do not kill living creatures. 2. Do not steal. 3. Do not marry. 4. Speak not falsely. 5. Drink no wine. The *Shamans*, *Hoshangs*, or priests are associated together in monasteries attached to the temples of Fo. They are in China precisely a society of mendicants, and go about like monks of that description in the Romish church, asking alms for the support of their establishment.

Their tonsure extends to the hair of the whole head. There is a regular gradation among the priesthood; and according to his reputation for sanctity, his length of service, and other claims, each priest may rise from the lowest rank of *servitor*, whose duty it is to perform the menial offices of the temple, to that of officiating priest, and ultimately of *Tae Hoshang*, abbot or head of the establishment. The curious resemblance that exists between the observances of the Budhist priests of China and Tartary and those of the Catholic church has excited the surprise of the missionaries from the latter; and the observations and surmises of Père Gerbillon, who was intimately acquainted with the subject, may by some be considered worthy of attention. He questioned a well-informed Mongol as to the time when his countrymen had first become devoted to the Lama of Thibet, who is a spiritual sovereign closely resembling the pope. The reply was, that priests first came into Mongol Tartary in the time of Koblai Khân, but that these were really persons of holy and irreproachable lives, unlike the present. The father supposes that they may have been religious Christians from Syria and Armenia, the communica-

tion with which countries being subsequently cut off by the dismemberment of the Mongol empire, the Budhist priests mixed up their superstitions with the Catholic observances. Certain it is (and the observation may be daily made even at Canton) that they now practise the ordinances of celibacy, fasting, and prayers for the dead: they have holy water, rosaries of beads which they count with their prayers, the worship of relics, and a monastic habit resembling that of the Francisans. These strange coincidences led some of the Catholic fathers to conjecture that the Chinese had received a glimpse of Christianity, by way of Tartary, from the Nestorians; others supposed that St. Thomas himself had been among them; but Père Prèmare was driven to conclude that the devil had practised a trick to perplex his friends the Jesuits. To those who admit that most of the Romish ceremonies and rites are borrowed directly from paganism, there is less difficulty in accounting for the resemblance.

Chinese history relates, that about the middle of the tenth century, the Emperor Kien-te, who founded the Soong dynasty, sent three hundred Shaman or Budhist priests into India, on purpose to procure the books and relics of the god. After passing the river *Heng-ho* (Gunga or Ganges) they saw a large image of Fo in the south. In the homilies of the priests there often occurs this sentence—"Oh Fo, existing in forms as numerous as the sands of the *Heng-ho*." Their books mention a country called *Sy-lan*, (Ceylon,) in which, near the sea, there is on a certain mountain (Adam's Peak) the print of a foot three cubits in length. At the base of the hill is a temple, in which the real body of Fo is said to repose on its side; and near it are teeth and other *relics* of Budha, called by the priests *Shay-ly*. It is but justice to the Chinese to say, that in importing some of the Indian deities and their superstitions.

they have wisely left behind *all* the indecencies and fanatic madness of Indian worship, and that such horrors as those enacted at Jaggernath and elsewhere could never in the slightest degree be practised under a government like that of China.

One of the principal objects of curiosity at Canton is a temple and monastery of Fo, or Budha, on a very considerable scale, situated upon the southern side of the river, just opposite to the European factories. It is said that towards the close of the last Chinese dynasty, and about A.D. 1600, a priest of great sanctity raised the reputation of the temple which had been for some time before established in that place; and a century afterward, when the Manchows had taken possession of Peking, the son-in-law of Kâng-hy, who had been sent to subdue Canton, and was therefore called "Subjugator of the South," took up his residence in the temple, which he at length patronised and greatly enriched. The funds soon sufficed to maintain a crowd of priests, who established themselves there with their monastic discipline, and it has been a place of consideration ever since. "I visited one evening," says Mr. Bennett,* "the temple situated a short distance on the opposite side of the river to that on which the factories are built. Having crossed with my companions in a boat, we proceeded a little way down the river, and landed at a dirty causeway near some timberyards, in which a quantity of fir timber of various dimensions was piled with an extreme degree of regularity. The entrance to the temple or temples, and extensive grounds about them, was close to the landing-place; and passing some miserable fruit and eating stalls adjoining, we noticed a large clean open space, planted with trees, and having in the centre a broad pavement of granite kept very

* Wanderings, &c., vol. ii., p. 107.

clean. The quietness that reigned within formed a pleasing retreat from the noise and bustle without. This paved way brought us to the first portico; here we beheld on huge granite pedestals a colossal figure on each side, placed there as guards of the entrance of the temple of Budha; the one on the right in entering is the warrior Chin-ky, and on the left is Chin-loong. After passing these terrific colossal guards, we entered another court somewhat similar to the first, also planted with trees, with a continuation of the granite footpath, which led (through several gateways) to one of the temples. At this time the priesthood were assembled, worshipping, chanting, striking gongs, arranged in rows, and frequently performing the *Ko-tow* in adoration of their gilded, senseless deity. * * * * * . The priests, with shaven crowns, and arrayed in the yellow robes of their religion, appeared to go through the mummery with devotion. They had the lowering look of bigotry, which constant habit had at last legibly written upon their countenances. * * * * * * As soon as the mummery had ceased, the priests all flocked out of the temple, adjourned to their respective rooms, divested themselves of their official robes, and the senseless figures were left to themselves, with the lamps burning before them."

The nine-storied pagodas of China, of which that in Kew-gardens is a poor copy, (the originals being more lofty, if not more substantial,) are connected with the religion and worship of Fo. Images of that deity, and of the various gods and saints associated with him, are found in niches of the wall, in mounting the spiral staircase which conducts to the summit. Although Budha is not now worshipped in India, he is at least considered of the ninth incarnation of Vishnu. It may therefore be conjectured that the *nine* stories of the pagodas in question have some reference to this circumstance, the real meaning of the number never having been exactly ascertained

Again, in our progress through the interior, with Lord Amherst's embassy, pagodas with only *seven* stories were met with; and it is possible that this number may convey a mystical allusion to the *seven* Budhas who are said to have existed at different periods. Wherever these pagodas are in good repair, (for many are mere ruins,) they are found attached to extensive establishments partaking of the nature of foundations, with a portion of their revenues derived from land adjoining. They are enriched by the contributions and bequests of their votaries, and most of them support a crowd of idle and ignorant priests; but the government has nothing to do with their maintenance. The books of the Budhist religion, which are read and chanted in these establishments, are partly translated into Chinese from the originals in the Pâli language, a dialect of the Sanscrit: and in the person of the Grand Lama of Thibet (whose soul on quitting the body is supposed instantly to animate that of an infant) the doctrine of transmigration is said to be practically illustrated.

The indifference, and even repugnance which are displayed by the government of China Proper towards the professors of Budhism, become quite altered on the other side of the great wall towards Mongol Tartary. When Gerbillon was sent by the emperor in company with a Chinese mission beyond the wall, one of the principal Lama priests did not come out of his tent, nor even send a civil message to the representatives of the emperor, who (no doubt with authority from the sovereign) performed a sort of adoration to the living idols. These, in their swinish laziness and stupidity, are supposed to display a kind of mystical abstraction from mundane affairs, and an absorption into the divine nature of Fo. The truth seems to be, that a faith which is good enough for the barbarous and ignorant nomades of Tartary is not so well suited to the comparatively enlightened and sensible Chinese, with whom the ra-

tional system of Confucius (with all its faults and imperfections) must ever hold the supreme rank, even under a Tartar dynasty whose native religion is Budhism.

It is specifically urged against the doctrines of Fo by the Confucians, that they unfit men for the business and duties of life, by fixing their speculations so entirely on another state of existence as to lead some fanatics to hang or drown themselves in order to anticipate futurity: nay, two persons have been known to commit suicide together, with a view to becoming man and wife in the next world. The priests are sometimes accused of employing their superstitious arts in seducing women: societies of women, at least, called *Ny-koo*, a species of nuns or female devotees, are encouraged by them. The tricks occasionally made use of by the priests resemble the practices of the fakirs in India. Le Comte tells a story of a bonze, who went about in a vessel stuck full of nails, (something like that in which the Carthaginians are said to have shut up Regulus,) and pretending that it was a merit to relieve him from his pain, he sold these nails to the devout at so much per head. Their notion of total abstraction, or quietism, seems to aim at getting rid of all passions, even of thought itself, and ceasing to be urged by any human desires; a species of mental annihilation. Certainly, to judge by its effects on the priests, the practice of Budhism appears to have a most debasing influence. They have, nearly all of them, an expression approaching to idiocy, which is probably acquired in that dreamy state in which one of their most famous professors is said to have passed nine years, with his eyes fixed upon a wall! They say with reference to their system of moral retribution, that what a man receives now is an indication of his conduct in a former state; and that he may augur his future condition by his behaviour in this life. The merit, however, would seem to consist as much in

inaction as action; in the abstinence from evil, or the mere self-infliction of pain, as the practice of good. They make up an account with Heaven, and demand the balance in bliss, or pay it by sufferings and penances of their own, just like the Papists of Europe.

Independently, however, of Budhism, the Chinese have a great idea of the efficacy of charitable and merciful acts, and of the merit of alms giving. "The good and evil deeds of the fathers," they say, "will be visited on the children and grandchildren." The emperor himself, on occasions of drought and public calamities, or when some of the imperial house are ill, grants general pardons and amnesties. The same ideas are attached to public fasts, when a severe interdict is laid on the slaughter of animals, and no meat can be offered for sale. Such was the case at Canton in 1834, on the occurrence of the inundations. The system of promiscuous alms giving is one principal encouragement to beggary. It has been mistakenly asserted that there are no beggars in China, while there are, in fact, a great many, notwithstanding the religious attention paid to the claims of kindred. Beggars are seldom turned away from houses and shops without a trifle, which they extort by their whining and persevering importunities.

In a work of some note on morals, called "Merits and Demerits examined," a man is directed to keep a debtor and creditor account with himself of the acts of each day, and at the end of the year to wind it up. If the balance is in his favour, it serves as the foundation of a stock of merits for the ensuing year; and if against him, it must be liquidated by future good deeds. Various lists and comparative tables are given of both good and bad actions in the several relations of life; and benevolence is strongly inculcated in regard, first, to man, and, secondly, to the brute creation. To cause another's death is reckoned at one hundred on the side of demerit; while a single act of charitable relief counts

as one on the other side. This method of *keeping a score* with Heaven is as foolish and dangerous a system of morality, as that of penances and indulgences in the Romish church. To save a person's life ranks, in the above work, as an exact set-off to the opposite act of taking life away; and it is said that this deed of merit will prolong a person's life twelve years. A pretty correct idea of Chinese moral sentiment might be gathered from the scale of actions there given. To repair a road, make a bridge, or dig a well, ranks as ten; to cure a disease, as thirty; to give enough ground to make a grave, as the same; to set on foot some very useful scheme or invention, ranks still higher. On the other hand, to reprove one unjustly counts as three on the debtor's side; to level a tomb, as fifty; to dig up a corpse, as one hundred; to cut off a man's male heirs, as two hundred; and so on. These notions are not peculiar to the Budhist sect, but prevail universally among the Chinese, who are as little troubled with sectarian divisions and animosities as any people in the world.

A paper by the Rev. Mr. Gutzlaff, in the second volume of the Chinese Repository, contains a very correct account of Budhism as it now exists in the celestial empire. He observes of the priests that they scarcely address themselves to the understanding, "but are content with repeating the prayers delivered to them in the Pâli, to them an unintelligible language; and they pay their adoration to an indefinite number of images, according to the traditions of their religion. In China, where the peculiarity of the language precludes its being written with alphabetic accuracy, the Pâli degenerates into a complete jargon," wherein the sound is imperfectly preserved and the meaning wholly lost. Mr. Gutzlaff tried in vain to decipher the hard words, and, after all his inquiries among the priests, succeeded so little in satisfying himself, that he was obliged to relinquish

the point. They seem, in fact, to repeat their prayers altogether by rote, and to be ignorant of the meaning of a very considerable portion of their sacred books.

Budhism being, as we have before observed, invited into China about the middle of the first century of our era, the progress of its professors is thus explained by the same writer:—"Accommodating their system to all the existing superstitions, they opened the door to every sort of converts, who might retain as many of their old prejudices as they chose. They were by no means rigorous in enforcing the obligations of men to morality. To expiate sins, offerings to the idols and to the priests were sufficient. A temple built in honour of Fo, and richly endowed, would suffice to blot out every stain of guilt, and serve as a portal to the blessed mansions of Budha. When death approached, they promised to every one of their votaries speedy promotion in the scale of the metempsychosis, till he should be absorbed in Nirupan or Nirvana—nonentity. With these prospects the poor deluded victim left the world. To facilitate his release from purgatory, they said mass, and supplied the wants of the hungry departed spirit by rich offerings of food, which the priests in reality devoured. As Confucius had raised veneration for ancestors into idolatrous* worship, they were ready to perform the office of priests before the tablets of the dead.

"But notwithstanding their accommodating creed, the Chinese government has at times disapproved of it. As the importance of marriage has been acknowledged in China from time immemorial, and almost every person at years of maturity been obliged to enter that state, the celibacy of the priest-

* Not exactly idolatrous. They sacrifice to the invisible spirit, and not to any representation of it in the figure of an idol

nood of Fo was considered a very dangerous custom. Budha regarded contemplation and exemption from worldly cares as the nearest approach to bliss and perfection; therefore his followers passed lives of indolence, and practised begging as the proper means of maintaining themselves. This was diametrically opposed to the political institutions of China, where the emperor himself sets the example of holding the plough. If such a system prevailed extensively, the immense population of the empire must be reduced to starvation, for it is only by the utmost exertion that it can subsist. These serious faults in the foreign creed gave occasion for its enemies to devise its extirpation. It was proscribed as a dangerous heresy, and a cruel persecution followed, but it had taken too deep root to be easily eradicated. Then again some emperor would think more favourably of its tendency, and even adopt it himself. Yet the natural consequence of its tenets was, that it could never become a religion of the state, and that the priests were never able to exercise any permanent influence over the populace. Besides, the Chinese are too rational to believe implicitly all the absurd Budhistic fables, nor can they generally persuade themselves that those numerous images are gods. When we add to this their national apathy towards everything concerning religion, from their being entirely engrossed by the affairs of this life, we can easily account for the disesteem in which they hold Budhism."

The present condition in China of the religion of Fo is very far from flourishing, and the extensive and magnificent establishments, which have been founded in former times, are evidently in a state of dilapidation and decay. It is rarely that one meets with any of their nine or seven storied pagodas in tolerable repair, though one or two of these striking

and elegant objects occur in almost every landscape. Between Macao and Canton there are no less than four or five nine-storied pagodas on elevated points by the river side, and every one of them is in a state of ruin. They serve, however, as admirable landmarks in the navigation of the river. The monasteries, or establishments of mendicant priests, are generally found in the most romantic spots of the hilly country. One of these particularly attracted the attention of both our embassies, from its very remarkable situation; and Lord Macartney has given a description of it which must be admitted to be somewhat beyond the reality. This temple of the goddess *Kuan-yin* (one of the principal idols of the Budhists) is seated in the face of a perpendicular limestone cliff, at least five hundred feet in height, and can be approached only by boats, as it rises abruptly from the side of the river about three or four days' journey above Canton. The natural fissure or cavern in the rock has been enlarged by human labour; and the abodes of the priests and idols consist of several chambers, one above the other, which are severally approached by stairs and shelving portions of the limestone. In front of the middle story hangs an enormous mass of stalactite, at least a ton in weight, threatening destruction to all who approach the temple from below.

The resemblance which we have already noticed between the ritual of Fo in these temples and the Roman Catholic ceremonies has excited the attention of Mr. Gutzlaff. "That they count their prayers," says he, "by means of a rosary, and chant masses for both the living and the dead; that they live in a state of celibacy, shave their heads, fast, &c., might be perhaps accounted for as a mere coincidence of errors into which men are prone to fall; but their adoration of *Tien-how*, 'the queen of heaven,' (called also *Shing-moo*, 'the holy mother,') must be a tenet in-

grafted upon Budhism from foreign traditions. We are unable to fix the exact date of the adoption of this deity. There is a legend of modern date among the people of Fokien, which tells us that she was a virgin of that province, who in a dream saw her kindred in danger of being wrecked, and boldly rescued them; but this affords no satisfactory solution. It is likely that some degenerate Nestorian Christians amalgamated with their faith and ceremonies the prevailing errors of China, and caused the priests of Budha to adopt many of their rites." In one instance that missionary saw a marble bust of *Napoleon*, before which incense was burnt in a temple; hence, he adds, it would not be extraordinary if they had also adopted among their other idols so conspicuous an object of worship as the Virgin is among Catholics.

In corroboration of this surmise may be adduced a very curious account of Christ, taken by Dr. Milne from the Chinese mythological history, in which Jesus is ranked among the number of the gods.* That the account was received by the Chinese from the Catholics seems indisputably proved by the epithets applied to the Virgin, and the virtues and powers attributed to her. The work in which it appears is called "A Complete History of Gods and Genii," and was compiled in two-and-twenty thin octavo volumes by a Chinese physician, during the reign of Kâng-hy, at a time when many Catholics were in China. "The extreme western nations say, that at the distance of ninety-seven thousand *ly* from China, a journey of about three years, commences the border of Sy-keang. In that country there was formerly a virgin named Ma-le-a. In the first year of Yuen-ehy, in the dynasty Hân, a celestial god reverently announced to her, saying 'The Lord of heaven has seleeted thee to be his

* Chinese Gleaner, p. 105.

mother.' Having finished his discourse, she actually conceived and afterward bore a son. The mother, filled with joy and reverence, wrapped him in a cloth, and placed him in a horse's manger. A flock of celestial gods (angels) sang and rejoiced in the void space. Forty days after, his mother presented him to the holy teacher, and named him Yay-soo. When twelve years of age, he followed his mother to worship in the holy palace. Returning home, they lost each other. After three days' search, coming into the palace she saw Yay-soo sitting on an honourable seat, conversing with aged and learned doctors about the works and doctrines of the Lord of heaven. Seeing his mother he was glad, returned with her, and served her with the utmost filial reverence. When thirty years of age, he left his mother and teacher, and travelling to the country of Yu-teh-a, taught men to do good. The sacred miracles which he wrought were very numerous. The chief families, and those in office in that country, being proud and wicked in the extreme, envied him for the multitude of those who joined themselves to him, and planned to slay him. Among the twelve disciples of Yay-soo, there was a covetous one named Yu-tah-sze. Aware of the wish of the greater part of his countrymen, and seizing on a proffered gain, he led forth a multitude at night, who taking Yay-soo, bound him and carried him before Ana-sze in the courthouse of Pe-lah-to. Rudely stripping off his garments, they tied him to a stone pillar, inflicting on him upwards of 5,400 stripes, until his whole body was torn and mangled; but still he was silent, and like a lamb remonstrated not. The wicked rabble, taking a cap made of piercing thorns, pressed it forcibly down on his temples. They hung a vile red cloak on his body, and hypocritically did reverence to him as a king. They made a very large and heavy machine of wood, re-

sembling the character *ten*,* which they compelled him to bear on his shoulders. The whole way it sorely pressed him down, so that he moved and fell alternately. His hands and feet were nailed to the wood, and being thirsty, a sour and bitter drink was given him. When he died, the heavens were darkened, the earth shook, the rocks, striking against each other, were broken into small pieces. He was then aged thirty-three years. On the third day after his death, he again returned to life, and his body was splendid and beautiful. He appeared first to his mother, in order to remove her sorrow. Forty days after, when about to ascend to heaven, he commanded his disciples, in all a hundred and two, to separate, and go everywhere under heaven to teach, and administer a sacred water to wash away the sins of those who should join their sect. Having finished his commands, a flock of ancient holy ones followed him up to the celestial kingdom. Ten days after, a celestial god descended to receive his mother, who *also* ascended up on high. Being set above the nine orders, she became the empress of heaven and earth, and the protectress of human beings."

There appears, upon the whole, some ground for supposing that the legend of Fokien province, concerning the *queen of heaven*, may have had its origin from the Romish accounts of the Virgin Mary, since the title by which the Chinese designate their goddess is *Tëen-how Neang*, "Our Lady the Queen of heaven." On the other hand, the Chinese at Canton, who are fond of finding parallels and resemblances of the kind, give the name of the Virgin (in conversing with Europeans) to their Budhist idol *Kuan-yin;* and in the same way apply the name of *Kuan-yin* to the Romish idols of the Virgin. To every saint who has a church at Macao they contrive to give a name, founded on some supposed

* The Chinese write ten with an upright cross

analogy in their own idols. St. Anthony they call "the fire god." There is nothing in the Catholic worship at that place, or in the character of the priests, that is calculated to give the Chinese a very exalted idea of this corruption of Christianity. In the former, they see graven or molten images, processions, tinkling of bells, candles and incense, exactly resembling their own religious rites; in the latter, a number of ignorant and idle monks, professing celibacy, but with indifferent moral characters, shaving their heads, and counting beads very much after the fashion of the Buhist priests. A few Catholic missionaries still make converts of the lowest and poorest Chinese, who occasionally appear at the churches, and receive each of them a small donation of rice, for which reason they are sometimes called in Portuguese, "rice Christians."

The curious resemblance between the practices of Chinese Budhism and the Roman Catholic church goes still further. Dr. Milne, whose zeal and talents accomplished much in a little time, but whose labours were cut short by an untimely death, supplied the following observations to the Chinese Gleaner:*—"There is something to be said in favour of those Christians who believe in the magic powers of foreign words, and who think a prayer either more acceptable to the Deity, or more suited to common edification, because the people do not generally understand it. They are not singular in this belief. Some of the Jews had the same opinion; the followers of Budha, and the Mohammedans, all cherish the same sentiment. From the seat of his holiness at Rome, and eastward through all Asia to the cave of the Jammaboos of Japan, this sentiment is espoused. The bloody Druids of ancient Europe, the naked gymnosophists of India, the Mohammedan Ha-

* Vol. iii., p. 141

tib, the Hoshang (Budhist priests) of China, the Catholic clergy, and the bonzes of Japan—all entertain the notion that the mysteries of religion will be the more revered the less they are understood, and the devotions of the people (performed by proxy) the more welcome in heaven for their being dressed in the garb of a foreign tongue. Thus the synagogue, the mosque, the pagan temple, and the Catholic church seem all to agree in ascribing marvellous efficacy to the sounds of an unknown language; and as they have Jews, Mohammedans, and pagans on their side, those Christians who plead for the use of an unknown tongue in the services of religion, have certainly a host, as to number, in support of their opinion. That Scripture, reason, and common sense should happen to be on the other side, is indeed a misfortune for them, but there is no help for it.

"The sacred language of the Budhists is called 'The language of *Fan*,' which is the name of the birthplace of Budha. It is totally unknown to the Chinese generally, and the priests themselves know nothing of it, beyond the sound of a few favourite words and phrases. There are, it is true, glossaries attached to some of their religious books, which are designed to explain these technical shibboleth; but the definition is sometimes given in other technical terms equally unintelligible, and from their general ignorance of letters, very few of the priests are capable of consulting such helps. Among them there may now and then be found a scholar, and some have written books, but as a body they are extremely ignorant. Beyond the stated and occasional lessons of their liturgy, which they have learned to repeat by rote, they have very little knowledge of books, and many of them cannot read. As a sect, however, they profess to cherish the most profound veneration for the language of Fân. They ascribe miraculous effects to the use of the written character and

of the oral language, and consider both to be of celestial origin.

"To the repetition of the bare sounds, without regard to the meaning, they attach the highest importance; hence they occasionally go over the same words hundreds and thousands of times. I once asked a priest, 'What advantage can you expect to derive from merely repeating a number of words, with the sense of which you are entirely unacquainted?' His answer was, 'True, I do not know the sense—it is profound and mysterious; yet the benefit of often repeating the sounds is incalculable; it is infinite!'

"Let us now attend for a moment to the sentiments of the Malays on the same subject. Their religious opinions are derived from the Koran, the principles of which they profess to imbibe, and daily observe its ceremonies. No language but the Arabic is allowed in their public religious services, and though there be not one in a hundred Malays that understands it, they tenaciously stick to it, and consider worship as profaned by the use of any other. Let them speak for themselves. 'The Arabic language possesses superlative glory in the Islam religion, and no other can be allowed in the Mohammedan mosques. If prayers be offered in the Malay Javonese, Buggis, Bornean, Hindoostanee, or other languages, they are rendered profane and useless. The Arabic is that in which the Mohammedan faith was first given. The angel Gabriel was commanded by God to deliver the words of the Koran exclusively in Arabic to the prophet Mohammed.'"

But to return to Budhism. The paradise of Fo includes those circumstances of sensual indulgence which the founders of most false religions have promised to their votaries; but, unlike the elysium of Mohammed, no *houris* are to be supplied to the saints of Budhism, for even the women that are admitted there must first change their sex. "The

dodies of the saints reproduced from the lotus* are pure and fragrant, their countenances fair and well-formed, their hearts full of wisdom, and without vexation. They dress not, and yet are not cold they dress, and yet are not made hot. They eat not, and yet are not hungry; they eat, and yet are not satiated. They are without pain, irritation, and sickness, and they become not old. * * * * * * They behold the lotus flowers and trees of gems delightfully waving like the motion of a vast sheet of embroidered silk. On looking upward they see the firmament full of the To-lo flowers, falling in beautiful confusion like rain. The felicity of that kingdom may justly be called superlative, and the age of its inhabitants is without measure. This is the place called the paradise of the west."

The hell of the Chinese Budhists may be described from a translation,† made by Dr. Morrison, of the explanatory letter-press on ten large woodcuts, which are exhibited on particular occasions in the temples, and copies of which have been mistaken sometimes in Europe for the criminal punishments of China, giving rise to very unfounded notions of the cruelty of penal jurisdiction in that country. Prior to their final condemnation, the souls are exposed to judgment in the courts of the *She-ming-wang*, "the ten kings of darkness:"‡ the proceedings in these courts are represented exactly after the manner of the Chinese judicial trials, with the difference in the *punishments*, which, in these pictures of the infernal regions, are of course sufficiently appalling. In one view is seen the judge with his attendants and officers of the court, to whom the merciful goddess *Kuan-yin* appears, in order to

* The lotus is a favourite type of creative power, and representations of it perpetually occur in connection with Budhism.

† Chinese Gleaner, vol. iii., p. 288.

‡ There is a festival to the honour of these, about the month of August. See Festivals, vol. i., p. 293.

save from punishment a soul that is condemned to be pounded in a mortar. Other punishments consist of sawing asunder, tying to a burning pillar of brass, &c. Liars have their tongues cut out; thieves and robbers are cast upon a hill of knives, and so on. After the trials are over, the more eminently good ascend to paradise; the middling class return to earth in other bodies, to enjoy riches and honours; while the wicked are tormented in hell, or transformed into various animals, whose dispositions and habits they imitated during their past lives.

One of the emperors of the Ming dynasty, who was much attached to the Budhist tenets, and who meditated sending, about the commencement of the 16th century, an ambassador with expensive presents to India, for the purpose of bringing some of the most learned of that sect to court, to explain their doctrines, was addressed by one of his ministers in the following strain:—"That for which the people of the world most honour and love *Shakia* himself amounts to this, that he continued to preach his doctrines during the space of forty years, and that he died at the age of eighty-two. This was indeed a great age, but the years of Shun were a hundred and ten; those of Yaou a hundred and twenty. Supposing that your majesty's extreme affection for the sect of Fo springs from a genuine wish to discover the good way, I venture to entreat your majesty not to love the name merely, but to seek diligently the reality; not to regard the end only, but carefully to search for the principle; and not to seek them from Fo, but from the spotless sages; not from foreigners, but in our own country. Could your majesty be persuaded to regard our sacred sages with the same ardour with which you love Fo, to seek the doctrines of Yaou and Shun with the earnestness which leads you to those of Shakia, there will be no need to send many thousand miles to the happy land of the west, for the object is at hand, and before your eyes.

* * * * * I adduce the testimony of Confucius, who says, 'The very moment I desire to be virtuous, the attainment is made,'" &c. It is by arguments allied to these that the introduction of foreign innovations has perpetually been restrained and checked in China, although occasionally, as in the case of Budhism, they have been tolerated, and for short periods gained some strength.

We may include within our sketch of Chinese Budhism some extracts from Mr. Hodgson's account* of that religion, as he found it in the "Bauddha scriptures of Nipal," much nearer to its source, and greatly better understood than it is in China. The primary motive for doing good and worshipping Budha, according to these scriptures, is the hope of obtaining absorption into the nature of the god, and being freed from transmigrations. Between the highest class of votaries and Budha there is no difference, because they will eventually become Budhas. Those who do good from the fear of hell, are also above the class of sinners, and their sufferings will be lessened; but they will be constrained to suffer several transmigrations, and endure pain and pleasure in this world until they obtain *mukti*, or absorption.

The mystic syllable AUM is not less reverenced by the Budhists than the Brahmins; but the latter apply it to their own *Trimurti*, or Triad of *Brahma Vishnu*, and *Siva*; while by the former it is applied to *Budha*, *Dharma*, and *Sanga*, which is the Triad represented by the three gilded images in the Canton temple, and is always alluded to in the Chinese books when they say that "Fo is one person, but has three forms." Their scriptures contain in native characters, which imitate as nearly as possible the Sanscrit sounds, the following invocation to the Triad:—*Namo Buddhaya*, *Namo*

* Royal Asiatic Transactions, vol. ii., p. 232.

Dharmaya, Namah Sangaya—Om! that is to say, "Adoration to Budha, adoration to Dharma, adoration to Sanga—AUM!" concluding thus with the mystical monosyllable, which represents the three terms united in one sign.* The three divinities are called by the Chinese "the three pure, precious, or honourable Fo," concerning whom Rémusat has given the following explanation:—"According to the interior doctrine, *Budha*, or the intelligence, produced *Dharma*, the law, and the two united constitued *Sanga*, the union, or combination of several. According to the public doctrine, these three terms are still the intelligence, the law, and the union; but, considered in their external manifestations, the intelligence in the Budhas to come, the law in the writings revealed, and the union in the multitude of the believers, or the assembly of *priests*. Hence it arises that the last have, among all the Budhist nations, the title of *Sanga*, united, which, being abridged in the Chinese pronunciation, has formed the word *Seng*, rendered by the missionaries "bonze," but which signifies, literally, ecclesiastic. Such are the sense and the origin of this well-known word, the etymology of which has not before been investigated."

The same writer has the following observation concerning the goddess *Kuan-yin*, one of the most important divinities in the Budhist mythology:—De Guignes, he says, wishing to explain the Chinese names of *Poo-sa* and *Kuan-she-yin*, adduces a passage from Kircher, who supposes that the being to whom these names are applied is Nature, and calls her the Cybele of the Chinese. He remarks that she is also called *Lotus-eyed*, and *born of the lotus flower*. Kuân-yin, then, he concludes, is the Lakshimi of the Indians. Rémusat, with apparent reason, combats this notion, and gives his own explanation in the fol-

* Abel Rémusat sur la Doctrine Samanéenne, p. 27.

lowing terms:*—The supreme intelligence (Budha) having by his thought (Dharma) produced union or multiplicity, (Sanga,) from the existence of this Triad arose five abstractions or intelligences of the first order, that is, Budhas, each of which produced an intelligence of the second order, *Bhodisatua*.† It is from this name that the Chinese have, by abbreviation, formed that of *Poo-sa*, common not only to these five secondary intelligences, but to all the souls which have attained the same degree of elevation. *Kuan-she-yin*, or *Kuan-yin*, is placed in the first rank; but *Padmanetra* (Lotus-eyed) is the name of another divinty of the same kind. The Sanscrit name of the former (Kuân-yin) is Padma-pâni, who represents, on account of her productive power, the second term of the Triad, and in the exterior doctrine is characterized by several signs of a female divinity It is certain that no idol in China is more honoured than Kuân-yin.‡

In the name of *Poo-ta-la*, a temple, or rather monastery, described in Lord Macartney's mission, may be recognised the Chinese pronunciation of Budha. This extensive establishment, which was found in Manchow Tartary, beyond the Great Wall, is described as a quadrangular structure of considerable height, each of its sides measuring two hundred feet, and the whole building affording shelter to no less than eight hundred priests or lamas.◊ In the square court or quadrangle within is a gilded

* Observations, p. 51.

† "*Poo-te-sa-to*, an Indian word introduced with the Budha sect; now, according to the genius of the Chinese language, contracted to *Poo-sa*."—*Morrison's Chinese Dictionary*, part ii., p. 682.

‡ M. Rémusat observes very truly that Chinese Budhism can only be duly investigated by comparing the Chinese versions with the Sanscrit texts, and thus combining two departments of learning which have not as yet been united in the same person.

◊ Staunton, vol. ii., p. 258.

chapel, with representations of the Triad, and the whole description assimilates it, though on the largest scale, to the monasteries in Nipal, as they are described by Mr. Hodgson. "The vihar is built round a large quadrangle or open square, two stories high; the architecture is Chinese. Chaitya properly means a *temple* of Budha, and vihar an abode of his cœnobitical followers. In the open square in the midst of every vihar is placed a chaitya; but those words always bear the senses here attached to them, and vihar can never be construed temple; it is a convent, or monastery, or religious house." Pootala, then, is a vihar, with a chaitya within the quadrangle.

The Chinese pronunciation of Budha seems also apparent in the name *Poo-to*, applied to an island of the Chusan group in latitude 30° 3′, and longitude 121°, where Mr. Gutzlaff,* in 1833, visited one of the largest establishments dedicated to Fo and his priests; a place of such note as to be the resort of numerous votaries from remote parts. "At a distance," says he, "the island appeared barren, and scarcely habitable; but as we approached it we observed very prominent buildings and large glittering roofs. A temple, built on a projecting rock, beneath which the foaming sea dashed, gave us some idea of the genius of its inhabitants in thus selecting the most attractive spot to celebrate the orgies of idolatry. We were quite engaged in viewing a large building situated in a grove, where we observed some priests of Budha walking along the shore, attracted by the novel sight of a ship. Scarcely had we landed, when another party of priests, in common garbs and very filthy, hasted down to us chanting hymns. When some books were offered them, they exclaimed, 'Praise be to Budha,' and eagerly took every volume that I had. We then ascended to a large temple, surrounded by trees and bamboos. An

* Journal of a voyage along the coast of China, 1832–33.

elegant portal and magnificent gate brought us into a spacious court, which was surrounded with a long range of buildings not unlike barracks being the dwellings of the priests. On entering it, the huge images of Budha and his disciples, the representations of Kuân-yin, the goddess of mercy, and other idols, with the spacious and well-adorned halls, exhibit an imposing sight to the foreign spectator.

"The high priest requested an interview. He was a deaf old man, who seemed to have very little authority, and his remarks were commonplace enough. We afterward followed a paved road, discovering several other smaller temples, till we came to some large rocks, on which we found several inscriptions hewn in very large letters.* One of them stated that China has sages. The excavations were filled with small gilt idols and superscriptions. On a sudden we came in sight of a still larger temple, with yellow tiles, by which we immediately recognised it as an imperial endowment. A bridge, very tastefully built over an artificial tank, led to an extensive area paved with quarried stones. Though the same architecture reigned in the structure of this larger building as in the others, we could distinguish a superior taste and a higher finish. The idols were the same, but their votaries were far more numerous: indeed this is the largest temple I have ever seen. The halls, being arrayed with all the tinsel of idolatry, presented numerous specimens of Chinese art."

"The colossal images were made of clay, and tolerably well gilt. There were great drums and large cylindrical bells in the temple. We were present at the vespers of the priests, which they chanted in the

* This is a common practice of visiters, who employ artists to cut these gigantic letters very deep into the face of the rocks. The embassy of 1816 met with them near the Poyang lake.

Pâli language, not unlike the Latin service of the Romish church They held their rosaries in their hands, which rested folded upon their breasts. One of them had a small bell, by the tinkling of which their service was regulated; and they occasionally beat the drum and large bell to rouse Budha's attention to their prayers. The same words were a hundred times repeated. None of the officiating persons showed any interest in the ceremony, for some were looking around, laughing and joking, while others muttered their prayers. The few people who were present, not to attend the worship, but to gaze at us, did not seem in the least degree to feel the solemnity of the service. Though the government sometimes decries Budhism as a dangerous doctrine, we saw papers stuck up, wherein the people were exhorted to repair to these temples in order to induce Heaven to grant a fertile spring; and these exhortations were issued by the emperor himself. What inconsistency!

"On the island are two large and sixty small temples, which are all built in the same style; and the idol of Kuân-yin holds a prominent station. We were told that upon this spot, not exceeding twelve square miles, 2,000 priests were living. No females are allowed to live on the island, nor any layman suffered to reside there, except in the service of the priests. To maintain this numerous train of idlers, lands on the opposite island have been allotted for their use, which they farm out; but, as this is still inadequate, they go upon begging expeditions, not only into the surrounding provinces, but even as far as Siam. From its being a place of pilgrimage, also. the priests derive great profits. To every person who visits this island it appears at first like a fairy land, so romantic is everything that meets the eye. Those large inscriptions hewn in solid granite; the many temples that appear in every direction; the highly picturesque scenery itself, with its many

peaked, riven, and detached rocks; and, above all, a stately mausoleum, the largest which I have ever seen, containing the bones and ashes of thousands of priests—quite bewilder the imagination "

CHAPTER XIV.

RELIGION—TAOU SECT.

Laou-keun, the Chinese Epicurus.—His Sect called Doctors of Reason.—Degenerated into Magicians and Alchymists.—Fragment of old Romance.—Illustrative Tale.—The Philosopher and his Wife.—Origin of the Tale of Zadig.—Miscellaneous Superstitions of the Chinese.—Fatalists.—Tale in illustration.—Spells and Talismans.—Belief in Ghosts.—Lucky and Unlucky Omens.—Divination.

The *third* religious or philosophic persuasion that has established itself in China is that of *Taou*, or of *Laou-keun*, which was the name, or rather title of the founder. This person appeared nearly simultaneously with Confucius, by whom he is mentioned about 560 years before the Christian era. As far as can be gathered of the real drift of his doctrines, he seems to have inculcated a contempt of riches and honours, and all worldly distinctions, and to have aimed, like Epicurus, at subduing every passion that could interfere with personal tranquillity and self-enjoyment. As death, however, was something that they could not pretend to despise, his disciples and successors set themselves to work to invent an elixir of long life, or of immortality, and thus became in time a species of *alchymists*. They have been alternately favoured and persecuted at different periods of Chinese history, but seem to have flourished most under the Soong dynasty, subsequent to

the tenth century of our era, a period when all speculative opinions and every species of spurious learning were most in vogue.

The principal commentator on the works of Confucius speaks of *Laou-keun*, or, as he is sometimes styled, *Laou-tze*,* with little respect, and calls him "an ignorant good man." He is there described as a recluse, who was distinguished by his humility, uprightness, simplicity of life, and exemption from cares and passions. He taught and practised a weak inactivity and neglect of the world and its concerns, loving neither fame, nor pleasure, nor business. It is reasonable to suppose that the principal fabric of that doctrine which now distinguishes the professors of the Taou sect, was the work of those who succeeded Laou-keun, and made use of his name as the foundation of their system. They call him "the original ancestor, or founder, honoured of Heaven;" and the account given of him in popular books is, that he was an incarnation of some superior being, and that there is no age in which he does not come forth among men in human shape They tell the various names under which he appeared from the highest period of fabulous antiquity down as late as the sixth century, making in all seven periods.† In imitation, perhaps, of the Budhist Triad, the followers of Taou have also their own triad, which they denominate "the Three pure ones." This threefold source and supreme ruler is represented as presiding in heaven among the assembled gods, the sun, moon, stars, and constellations, and delivering his name, accompanied by many epithets of benevolence and mercy, to the "great barefooted angel," to be promulged in the lower world, that among men all who see and recite that name may attain infinite happiness and complete

* The legend says he was born with white hair, and thence called *Laou-tze*, "the old infant."

† Morrison's Dictionary, part i., p. 582.

deliverance from all evil. Their principal scripture is the *Taou-te-king*, a Latin version of which exists in the library of the Royal Society.

Besides the practice of alchymy, to which they were led in their search of the elixir of long life, the disciples of Laou-keun have at different times professed the science of magic, and their arts of imposition were, at various periods of Chinese history, practised upon the sovereigns of the country. Under the Tang dynasty this superstition gained such credit that the title of *Tien-sze*, "Celestial doctors or teachers," was conferred on its professors: a superb temple was erected to Laou-keun, and his image placed in it. It is said that the representatives of the head of the sect have still a large establishment in the province of Keang-sy, where numbers flock from all parts to obtain cures for diseases, or to learn their destinies. The sect appears, in fact, to have degenerated very much from the character and tenets of the original founder, and many who wear the garb of the Taou-sze are at present little better than cheats and jugglers, professing to have communication with demons. The chief point of distinction in garb, between them and the rest of the Chinese, is the mode in which they dress their hair, which is fastened at the top of the head by means of a pin or skewer, somewhat after the fashion of the people of Loo-choo. It is by many degrees the least popular or predominant sect of China; its superstitions now engage only a few of the most ignorant, and the Taou-sze are but rarely seen.

In proof of the puerile nature of the superstitions which have occupied this sect, we may produce an extract from an original Chinese work, the history of the "Three States," in which are detailed the legends relating to the three brothers *Chang*, who professed the doctrines of the Taou sect, and at the head of an insurrection of rebels, called "Yellow

caps," produced those troubles which ended in the ruin of the Hân dynasty. "Lew-pei took occasion to steal upon Chang-paou with his whole force, to baffle which the latter mounted his horse, and, with dishevelled hair and waving sword, betook himself to magic arts. The wind arose with loud peals of thunder, and there descended from on high a black cloud, in which appeared innumerable men and horses as if engaged. Lew-pei immediately drew off his troops in confusion, and giving up the contest, retreated to consult with Choo-tsien. The latter observed, 'Let him have recourse again to magic; I will prepare the blood of swine, sheep, and dogs, and, placing a party on the heights in ambush, wait until the enemy approaches, when his magic will be all dispersed by projecting the same upon him.' Lew-pei assented to this, and directed two of his leaders, each with a thousand men, to ascend the highest part of the mountain, supplied with the blood of swine, sheep, and dogs, and other impure things.

"On the following day, Chang-paou, with flags displayed and drums beating, came forth to offer battle, and Lew-pei proceeded to meet him; but scarcely had they joined before Chang-paou put his magic in exercise; the wind and thunder arose, and a storm of sand and stone commenced. A dark cloud obscured the sky, and troops of horsemen seemed to descend. Lew-pei upon this made a show of retreating, and Chang-paou followed him; but scarcely had they turned the hill when the ambushed troops started up and launched upon the enemy their impure stores. The air seemed immediately filled with men and horses of paper or straw, which fell to the earth in confusion; while the winds and thunder at once ceased, and the sand and stones no longer flew about. When Chang-paou saw his magic thus baffled, he would have retreated at once, but Lew-pei's two leaders made their appearance on either side, while himself and his lieutenant pursued

in the rear. The rebels were defeated with great slaughter. Lew-pei, on seeing the flag inscribed 'Lord of Earth,' ran full speed on his horse towards Chang-paou, who took to flight, and in his retreat was wounded in the left arm with an arrow discharged at him by his enemy."

In regard to the word *Taou*, reason, which serves as the denomination of the sect under consideration, and with reference to which they style themselves "doctors of reason," it would seem that the ancient term *philosopher* in use among ourselves had very much the same origin. Some persons have spent much time in discussing the mysterious and recondite meanings which in Chinese metaphysics have been attached to the words *Taou* and *Ly*; but it would be useless to enter upon such a discussion in a work like the present, and we shall content ourselves with the popular meaning of those terms in connection with each other, which is simply *reason*. One of the missionaries of the Romish church supposed that *Taou* corresponded to the Greek λογος; but it has been objected to this, with some truth, that what several of the Chinese books affirm of *Taou* being the original source and first productive cause of all things, does not so well comport with the definition of the *Logos*, given in the philosophical systems which have adopted that term, and where it has been considered not as the *first cause*, but rather the first emanation from the Deity.

Laou-keun had four principal disciples, the chief of whom was *Chuang-tsze*, concerning whom the Chinese possess an agreeable tale, which has been translated into French by Père Dentrecolles. It may be a relief to the dry dulness of Chinese philosophy, and at the same time illustrative of this sect, if we give an abstract of the story, which is the more particularly deserving of notice, as it has supplied ample materials for the *Zadig* of Voltaire. The whole, it will easily be perceived, is a satire

on the female sex and on marriage, and might perhaps be meant as an indirect dissuasive against that state. The story commences with an enunciation of the principles of the Chinese Epicurus. "Riches, and the advantages which they bring, are but a short and agreeable dream: honours and reputation resemble a brilliant cloud, which soon vanishes. The affection of those united by blood and other ties is commonly but a vain appearance; the most tender friendships may convert themselves into the bitterest strifes. Let us not wear a yoke because it is of gold; nor bear the burden of chains because they consist of jewels. Let us purify our minds, moderate our desires, and detach ourselves from worldly affections: let us above all things preserve ourselves in a state of liberty and joy, which is independent of others."

Chuâng-tsze, the story proceeds to say, having married a young and beautiful wife, retired to his native country of *Soong*, the present Shantong, to lead the life of a philosopher. He declined the offer of the sovereign of a neighbouring state, who had been led by the fame of his wisdom to seek his services as minister, with the following apologue:— "A heifer, prepared for sacrifice with high and luxurious feeding, marched in state, arrayed in all the ornaments with which victims are adorned. In the midst of her triumph she perceived some oxen at the plough, and her pride was redoubled. But when, on entering the temple, the victim saw the knife raised in readiness for her immolation, she would gladly have exchanged lots with those whose condition had only just before been despised as inferior to her own."

One day as Chuâng-tsze was walking, immersed in thought, at the foot of a neighbouring mountain, he on a sudden found himself among a multitude of tombs; and being struck with the vast number of them, "Alas," exclaimed he, "here then all are equal: here there is neither rank nor distinction, bu

the most ignorant and stupid of men is confounded with the sage himself. The sepulchre is at last the eternal abode of all, and when we have once taken up our place in the habitations of the dead, there is no possibility of return." After spending some time in these gloomy reflections, he proceeded along the tombs, and soon found himself near a newly-constructed sepulchre. The hillock of tempered earth was not yet entirely dry. On one side of the tomb sat a young woman in deep mourning,* holding in her hand a large white fan, with which she constantly fanned the surface of the ground. Surprised at this sight, he ventured to ask whose tomb this might be, and why the lady took such pains in fanning it. She, however, without rising, continued to wave her fan as before, but muttered some words in a low tone, and at the same time let fall a few tears—a proof, thought the sage to himself, that shame rather than timidity prevented her from speaking out. When he had pressed her a little further to explain herself, she made him this reply: "You see a widow at the grave of her husband, from whom death has unhappily severed her. He whose bones rest in this sepulchre was very dear to me when alive, and loved me in return with an equal tenderness. Even in dying he could scarcely bear to part with me, and his last words were these: 'My dear spouse, if you should hereafter think of marrying again,† I conjure you to wait at least until the earth of my grave is entirely dry; after which you have my sanction to espouse whom you please.' Now as it occurred to me that the surface of this ground, which has been newly tempered, would not very soon dry, I thought I would just fan it a little to assist in carrying off the moisture."

* *i. e.* In a long white cotton garment, without a seam.

† Second marriages (as before stated) are rare on the part of women, and reflect some discredit on the widows.

The philosopher had much ado to avoid laughing outright at this plain avowal. "The woman," thought he to himself, "is in a monstrous hurry! How could she have the face to boast of the mutual affection between herself and husband. If this is love, I wonder what would have happened if they had hated each other!" Then turning to her he said, "Your wish is that the surface of this tomb should dry with all speed; but, delicate as you are, this exercise will soon tire you; let me, therefore, give you some assistance." The young woman immediately rose, and making him a profound reverence, accepted his offer by presenting him with another fan exactly like her own. The philosopher, who had the power of invoking spirits, now called them to his aid. He struck the tomb several times with the fan, and all appearance of moisture presently vanished. The lady upon this gayly thanked her benefactor, and taking a silver bodkin from her hair, presented it to him with her fan, begging he would accept the same as a small mark of her gratitude. Chuang-tsze declined the bodkin, but kept the fan, and the lady retired much satisfied with her adventure.

As for the philosopher, he remained altogether in astonishment; then abandoning himself to the reflections that naturally arose out of such an incident, he returned towards his home. Once seated in his chamber, he regarded the fan for some moments in silence, and presently broke out with such sentences as the following: "Would not one suppose from this, that when two persons marry, it is only from some hate conceived in a former state of existence; and that they seek each other in wedlock solely for purposes of mutual torment?" His wife had crept behind him without being perceived, but on hearing his words she came forward. "Might one know," she asked, "the cause of your sighing, and where it was you obtained that fan

which you hold in your hand?" Chuâng-tsze immediately related to his spouse the history of the young widow, as well as all that had passed at the tomb where he fell in with her.

Hardly had he finished his recital, when his lady, with a face beaming with wrath and indignation, loaded the young widow with a thousand malédictions, calling her the opprobrium of the human race, and the shame of her own sex! Then, looking at her husband, "I say it again," exclaimed she, "this woman must be a monster of insensibility." The philosopher, however, went on with the following reflections:—"While her husband is alive, where is the wife that does not flatter and praise him? Is he dead? see her ready to take her fan and dry up his tomb with all haste. So in a picture you see an animal's exterior, but not the inner parts; you see the face, but not the heart." This put his wife into a great passion. "How can you talk to me in that style," cried she, "thus to condemn the whole sex in a heap; thus unjustly to confound the virtuous with wretches who are unfit to live! Are you not ashamed to pass such an unjust sentence; and have you no fear of being punished for it hereafter?"

"To what purpose are all these ejaculations?" said the philosopher, calmly; "but confess the truth: were I to die to-day, surviving me as you would, in the flower of your age, with so much beauty and such attractions, do you pretend that you would allow three or more years to slip by without accepting another husband?" "Is it not the maxim," rejoined the lady, "that a faithful minister never serves another prince; that a virtuous widow never thinks of a second husband? Did one ever see a woman of my condition, who, after being once married, transferred herself to another family, and deserted her nuptial bed on her husband's first decease! If, for my misfortune, you were to reduce

me to the widowed state, know that I should be incapable of such an act, which would be the disgrace of our whole sex; nay, I should not even dream of marriage for the rest of my life."

"Such promises," observed he, "are easily made, but not often kept;" an observation which turned the ill-humour of his wife upon himself. "Know," cried she, "that women have often minds more noble and more constant than men of your stamp. What a perfect model of fidelity have *you* been: Your first wife dead, you took a second; her you repudiate and marry myself, who am your third. You judge of others by yourself. As for us women who marry philosophers, we are much less at liberty than any others to form a second marriage. But you are quite well in health; why then torment me with such remarks!" So saying, she snatched the fan out of her husband's hand, and tore it into twenty pieces. "Be quiet," said the philosopher; "your resentment gives me pleasure, and I am delighted to see you take fire upon such a subject." The lady became calm, and they talked of other matters.

In a few days more Chuâng-tsze became dangerously ill, and, to all appearance, at the very last extremity. His wife never quitted the bedside, where she sat bathed in tears, and continually sobbing. "From what I can see," said the philosopher, "I shall hardly recover from this attack. To-night or to-morrow morning we must part for ever. Alas, that you should have torn up the fan I brought you; it would have served so well to dry up the earth at my tomb!" "Ah," exclaimed his wife, "do not, in your present state, let such distressing suspicions enter your mind; suspicions, too, so injurious to myself! I have studied our books, and I know what our rites demand. My faith having been once sworn to yourself, it shall never be transferred to another; and if you doubt my sincerity, I consent, nay, I demand, to die before you, in order that you

may be persuaded of my truth." "That is enough," replied he; "I feel assured of your constancy: but, alas, I find myself dying, and my eyes are closing for ever upon you." So saying, he became breathless, and lay without a symptom of life.

The despairing widow, with loud cries of distress, now embraced the body of her deceased husband, and held it long locked within her arms. She then dressed herself in a long mourning habit, and made the neighbourhood resound with the expressions of her grief and desolation. She would indulge neither in food nor sleep, and, in short, seemed to be at her wits' end. The neighbours presently came to do honour to the remains of the deceased, whom they knew to be a sage of the first rank. As soon as the crowd began to withdraw, a youth was perceived, of fair exterior, and an elegant habit, who gave himself out to be descended from the sovereigns of that particular state. "It is some years," said he, "since I announced to the philosopher Chuâng-tsze my intention of becoming his disciple. I came hither with that express design, and now find, alas, that he is dead! What a loss have I sustained!"

He now discarded his coloured clothes, and put on a habit of mourning; then prostrating himself before the coffin of the departed, he touched the earth four times with his forehead, and exclaimed with a voice broken by sobs, "Wise and learned sage, your disciple grieves that he can no longer profit by your lessons; but he may at least mark his attachment and respect by remaining here a hundred days to mourn for you." He then renewed his prostrations, and watered the earth with his tears. After this, he desired to see the lady that he might make her his compliments; but she sent several excuses. The youth, however, represented that, according to the ancient rites, a woman might allow herself to be seen by the former friends of her husband. "I have," added he, "an additional title to

this privilege, since I am here as the disciple of the departed sage." At these pressing instances, the widow could not do otherwise than allow herself to be persuaded. She therefore issued from her chamber, and proceeded with slow steps into the hall, to receive her guest's compliments of condolence, which were few, and made in the usual terms.

When, however, the lady had observed the elegant manners, the wit, and the other numerous attractions of this young gentleman, she was altogether charmed, and began to feel all the symptoms of a rising passion which she durst not yet confess to herself, but which led her nevertheless to hope that the young man would not very soon quit the neighbourhood. He, on the other hand, anticipated her by saying, "Since I have had the misfortune to lose my master, whose memory must be ever dear to me, it is my wish to seek a temporary abode here, wherein to spend the hundred days of mourning; after which I may assist at the funeral ceremonies. At the same time I may take occasion to peruse the works of this illustrious philosopher: they will in some measure supply the want of those lessons of which I have been robbed by his death." "It will be an honour to our house," replied the lady; "and I can see no objection to it." So saying, she ordered a slight repast to be served up, and at the same time caused to be laid out on a commodious table the compositions of the philosopher, to which was added a copy of the celebrated *Taou-te-king*, which had been a present from Laou-keun himself, the master sage. The youth received the whole of these with the politeness natural to him, and the respect due to the deceased.

On one side of the hall, where the coffin was laid out, were two chambers which opened into it: these were destined for the accommodation of the young stranger. The widow came frequently to the hall

to weep over the remains of her husband, and on retiring never failed to say something civil to the youth, who always presented himself to pay his respects. In these frequent interviews, many a glance escaped them, which betrayed the hearts of either party. If the youth himself was half smitten, the young widow was wholly so. It was lucky for her that the house being in the country, the negligence of the customary funeral rites was not likely to be noticed. To satisfy her curiosity, she sent quietly for the old domestic who had accompanied the young man to her house, and inquired of him if his master was yet married. "Not yet," replied he. "And what sort of person would he wish his wife to be?" inquired the lady. "I have heard him declare," said the other, "that if he could only find one who resembled yourself, he should be at the height of his desires." "Very well, then," added the widow, "you may speak to him of me; and if you perceive that he loves me, tell him from myself that I shall be very well satisfied to be his wife."

"It is needless to sound him on that article," said the old man, "since he has frankly confessed to me that such a union would make him perfectly happy. 'But,' observed the youth at the same time, 'that can hardly take place, as I am a disciple of the defunct, and such a marriage would scandalize the world.'" "But that is no hinderance at all," exclaimed the lady: "your master was no real disciple of Chuâng-tsze, for he had only *promised* to become one, and that, you know, is quite another thing. Go, and should any other objection equally trivial occur, you can easily remove it, and I shall recompense you handsomely for your services." He promised to obey her. "Stop," said she, as he was going; "if the young gentleman desire that this marriage take place, you must come and inform me immediately, at whatever hour it may be." On his departure, she remained in a state of no ordinary anxiety, and went

repeatedly to the hall of mourning under differen pretexts, the real object being to discover what migh be going on in that quarter.

On one of these excursions, as she passed by the coffin of her husband in the dark, she heard a slight noise, which made her start aside with fear and surprise. "It cannot surely be the deceased coming to life," thought she to herself. Having repaired to her apartment for a lamp to investigate the mystery, the lady found her messenger stretched at full length on the table which served as an altar for incense and offerings before the corpse. He was sleeping off the effects of the wine which he had drunk on his late visit. Another woman would have broken out in indignation at such an act of irreverence to the dead; she, however, ventured neither to complain nor even to wake the sleeping sot, but retired to her chamber, where she found it impossible to rest.

On the following morning the widow met her messenger walking at his ease, and apparently without thinking of the commission with which he had been charged. Perplexed by this cold silence, she called him, and when they had retired to her apartment, "How have you succeeded?" inquired the lady. "There's nothing more to be done," replied the other, very dryly. "How is that?" said she; "did you not remember what I told you to say?" "I forgot nothing," he answered; "my master is very anxious for the union, and thinks nothing more of the obstacle that occurred to him before as the disciple of the deceased. 'But,' said the young gentleman, 'there are still three insurmountable objections, and I should be very unwilling to declare them to the widow herself.'" "Let us hear these objections," interrupted the lady, "and I will tell you what I think of them." "You shall have them as they were stated by my master," said he. "In the first place, then, the coffin of the deceased being

still laid out in the hall, this melancholy spectacle is of itself sufficient to interfere with the celebration of the nuptials. Secondly, the illustrious Chwâng-tsze having so tenderly loved his wife, and she having evinced for him so strong an affection, founded on his virtues and great capacity, 'I am afraid,' said the youth, 'that the heart of the widow must remain always devoted to her first husband; especially when she perceives my inferior merit. Lastly, I am here unprovided with either money or any other kind of property. Where, then, are the marriage presents and other requisites to be obtained?' These, madam, are the obstacles to his wishes."

"If those are all," observed the widow, "I can soon remove them. As to the first article, of what consequence is this melancholy piece of furniture? What does it contain?—an inanimate body, from which there is nothing to fear. I have at the extremity of my grounds an old ruin; some countrymen, whom I employ, shall remove the coffin there out of our sight. So much, then, for the first objection. As to the second, my late husband was indeed a fine specimen of what he intended to be! Before marrying me, he had already repudiated his second spouse. On the strength of his ill-founded reputation, the king of a neighbouring state wished to make him his chief minister. He, however, conscions of his incapacity, and afraid of showing it, came to hide himself in this solitary spot. Not a month since, he fell in with a young widow, who was trying to dry up, with her fan, the newly-turned earth about her husband's tomb, because she could not marry until this had taken place. The philosopher accosted her, and, taking her fan, did his best to please her by assisting to dry the tomb. He then kept this fan as a remembrance of his new acquaintance, and brought it home with him; but I took it from him and tore it in pieces. What great benefits

then, have I received from him, or what kindness did he ever show me? As for the last objection, I myself will provide everything requisite for the marriage. There, take these twenty taëls, offer them to your master; they will provide his dress. Make haste and inform him of all that I have told you If he agrees, I am prepared to conclude the marriage this very day."

The messenger proceeded with the twenty taëls to the youth, who now agreed to the proposals. As soon as the young widow heard it, she was quite overjoyed. She quitted her mourning at once, and began to adorn herself; at the same time that the coffin was transported, by her directions, into the old ruin. The hall was presently made ready for the celebration of the nuptials, and a grand feast prepared, in order that nothing might be wanting to the occasion. Towards night all the lanterns were lit, and the nuptial taper adorned the principal table. When all was prepared, the youth appeared, habited in a dress which set off to the best advantage his features and figure. The lady herself soon joined him, dressed in a silk garment splendidly embroidered. They placed themselves near each other, opposite to the nuptial taper. Thus contrasted, they set off each other's attractions, as pearls and jewels serve to heighten the splendour of a golden tissue, and at the same time derive a brilliancy from it in return. Having made the accustomed* salutations, and wished each other all felicity, they proceeded hand in hand to the interior apartment, where they went through the ceremony of drinking out of the cup of alliance, and then sat down to table.

Towards the conclusion of the repast, what was the astonishment of the late widow, and new bride, when the bridegroom all on a sudden fell into the

* For all the details of a Chinese marriage, the reader has been before referred to the *Fortunate Union*

most terrible convulsions! His features became distorted, his brows knit together, and his mouth twisted into frightful shapes. He could no longer hold himself erect, but fell at his full length on the floor. There stretched out, he beat his breast with both hands, calling out aloud that he had a sickness which must destroy him. Enamoured as she was to the last degree with her new spouse, the lady cried out loudly for help, and without any consideration for herself, fell on the floor and embraced the unfortunate youth, entreating him to tell her what was the matter: he, however, was in too great an agony to make any reply, and, in short, appeared just ready to expire.

The old domestic, running in at the alarm, took his master up and shook him. "Has this ever befallen him before?" inquired the afflicted lady. "The distemper has seized him several times," replied the other: "there seldom passes a year without such an attack; and but one remedy can save him!" "Tell me quickly," she cried; "what is it?" "Our physician," continued he, "discovered the secret, which is infallible: let him take the brain of a man newly killed, and drink it in warm wine; the convulsions will immediately cease, and he will be as well as ever. The first time that this illness attacked him, the prince, his father, ordered a condemned prisoner to be put to death on purpose; but, alas, where shall we find such a remedy at present!" "Would the brain of a man who died naturally have the same effect?" inquired the lady. "Our physician," replied the other, "told us, that in case of absolute need it might be used, provided that the person had not been too long dead."

"Oh," cried the lady, "my last husband has been dead only a few days; open his coffin, then, and take the remedy from thence." "I had thought of that," said the man, "but was afraid to propose it, lest it should offend you." "A great matter, truly!" exclaimed she. "Is not the present sufferer now

my husband? and ought I not to expend my own blood in his service? Why hesitate, then, to use the dead for the sake of the living?" With that she left her new spouse in the servant's care, and taking in one hand a hatchet used for cutting wood, while with the other she carried a lamp, away went the fair one to the old ruin, where the coffin of her late husband had been last deposited. Arrived there she tucked up her long sleeves, seized the hatchet with both hands, and lifting it above her head, struck with all her force upon the lid of the coffin, which split immediately in two. A woman's strength would not have served to break the lid of an ordinary coffin; but the philosopher, being aware that people sometimes return to life after seeming to be dead, had purposely directed that the planks of his coffin should be made very slight. A few more blows drove off the lid, and our lady, being out of breath with her exertions, stood still a moment to recover herself. At that instant she heard a deep sigh, and casting her eyes on the coffin, she saw her former husband move himself and set up!

One may imagine her dismay at this apparition; she uttered a loud scream, her legs tottered under her, and the axe fell unnoticed from her hands. "My dear wife," said the philosopher, calmly, "lend me your hand to get out of this." Once upon his legs, he took the lamp from her, and walked towards the hall. The lady followed him, but with faltering steps and sweating big drops; for she felt that her new husband must be the first object that met the eyes of her old one! When they reached the apartment, everything looked gay and splendid, but the youth and his attendant seemed luckily to have vanished. This gave her a little courage, and she now began to contrive some way of escaping from her embarrassment; so casting a tender look at the philosopher, "Ah," cried she, "my thoughts have been occupied day and night with your dear

memory: at length, having heard a distinct sound issue from the coffin, and recollecting the stories that they tell of dead persons returning to life, I flattered myself that you might be of the number. So I ran as fast as I could, and knocked off the lid. Thank Heaven, my hopes did not deceive me! What happiness to recover my dear husband, whose loss I should for ever have bewailed."

"I am much obliged by your kind attention," said the philosopher, "but have still one little question to ask you. How is it you are not in mourning; what is the reason that you are dressed out in this fine brocade?" The answer was ready. "I went," she replied, "to open the coffin, with a secret foreboding of my happiness: the joy of the occasion called for anything but a mourning dress, and it was inconsistent to receive you alive in a habit that relates only to the dead: I therefore put on my wedding clothes." "Well, well," said he, "we will let that pass. But why was my coffin stowed away in the old ruin, instead of this hall, which was its proper place?" This question posed the lady, and she had nothing to say. Chuang-tsze, then casting his eyes on the dishes and bowls, and other signs of rejoicing, considered them attentively without saying a word; he next called for some warm wine, and swallowed several cups in silence, while his wife stood by in the greatest confusion.

"Look behind you!" at length said the philosopher; and on turning round she perceived her intended with his follower, ready to enter the hall. This was a new subject of terror to her; but on looking round again, they had vanished.* In a word, this unhappy woman, finding all her intrigues discovered, and unable to survive her shame, retired to her chamber, and there, untying her silken

* The whole had been an illusion, practised by the adept in philosophy and magic.

girdle, hung herself by it to one of the beams. She soon became dead in earnest, without the chance of returning to plague her husband; who, finding her in that condition, cut her down very quietly, and, mending up his old coffin, laid her in it. Then, striking up a mock dirge on the cups and bowls intended for the feast, he broke them all in pieces with great shouts of laughter, and ended by setting fire to the mansion, and burning his wife's body in the ruins, from which nothing was saved except the sacred book called *Taou-te-king*.

After that, the philosopher set out on his travels, quite resolved never to take another wife. In his wanderings, he fell in again with his master Laoutsze, to whom he attached himself for ever after, and became the first of his disciples.

It remains for us to describe a variety of superstitious customs and observances which are practised by the Chinese, either with or without a particular relation to some *one* of the three sects, or persuasions, which have been already noticed. In common with a considerable portion of the rest of mankind, they are pretty generally fatalists, or believers in inevitable destiny; and the practical mischiefs of such a creed cannot be more strongly displayed, than in the consequences resulting from their apathetic carelessness in regard to the use of *fire*. Notwithstanding the repeated conflagrations which every year devastate the town of Canton, the same unaccountable negligence is perpetually apparent to the most casual observer, who, in perambulating their streets, or taking notice of their domestic habits, cannot fail to be struck by the extreme carelessness with which burning paper and lighted sticks of incense are left about their combustible dwellings, or pipes smoked and bunches of crackers discharged in temporary edifices constructed en-

tirely of *matting*. It has been already mentioned that, in the year 1822, the whole of the European factories were laid in ashes by a fire which originated in a small shop, and which, before it had run its course, destroyed a very considerable portion of the city. Some of these fires are doubtless the work of incendiaries, who hope to profit in the confusion; but a large number must also be considered as the results of that stupid belief in fatalism, which tends to paralyze effort and to banish caution. Hence the thriving trade that is carried on by fortunetellers and calculators of destiny.

That the wiser and better portion of the Chinese, however, are occasionally above the influence of this grovelling sentiment, seems proved by the existence of a treatise in their language, wherein it is shown that a man may "lay the foundation of his own destiny;" or, in other words, that *conduct is fate*. The author relates, that being left by the death of his father without a guide at a very early age, he consulted an old man with a long beard, who professed the art of divination. This person told him that in such a year he should attain a scholar's decree at the public examination within his district, and that, in some other year, he should succeed at the higher trial in the provincial capital. It so happened that these events occurred as they had been predicted, and his faith became accordingly confirmed in the skill of the soothsayer, who next informed him, after predicting the various vicissitudes of his remaining life, that he would die at the age of fifty-three, on a particular day, and at a particular hour of the morning. Being confirmed in the belief that his whole course of existence was thus fixed by an immutable decree of fate, he became henceforward quite indifferent to active effort and exertion of every kind. It chanced that he fell in, some time after, with a sage of a very different description, who took him to task for his apathy. "Can a man,

then," inquired our disciple, "escape the allotments of destiny?" To which the other replied, "Fate is of our own making, and happiness the result of our own conduct. The whole field of happiness is contained within the circumference of the heart, which, when once effectually moved, ensures success. *Seeking* rests with ourselves, and has a great influence upon *attainment*." Persuaded by this admonition, the reformed believer in destiny first prayed to Fo (for he was a Budhist) that he might be successful in his pursuits, and then vowed to perform three thousand acts of merit that he might deserve success. The sage drew out for him a register of conduct, in one column of which his good deeds were to be inserted, and in the other his errors;* the first to be carried to his credit, and the last to be scored out as the former increased.

In the following year an examination was held at Peking of those who had attained the highest degrees in the provinces, and though the conjurer had predicted that our scholar should rank as only *third* among the successful candidates, it so happened that he was *first* on the list, and thus his faith in fortunetelling was completely overturned. When the three thousand acts of merit which he had formerly vowed were, after the lapse of some years, nearly completed, the thought of praying for a son (an essential ingredient in Chinese prosperity) next arose in his mind. He again vowed the performance of three thousand good deeds; and after some time a son was born to him. On this occasion, however, the registration of acts of merit seemed to be a joint stock concern, for whatever he did himself he recorded in writing; but his wife, who could not write, cut off the end of a goose-quill, and dipping it in vermilion, impressed a red point, for every good action she performed, in the

* See p. 88.

register. The story says that there would sometimes be many of these in a day.

By perseverance in a similar course of virtue, our scholar at length attained to the rank and office of governor of a district. He now commenced a new blank register, and vowed to perform no less than ten thousand acts of merit. Somewhat dismayed at the extent of the undertaking, he one night applied for advice and instruction to some spiritual being which presented itself in a vision. The answer was, "Curtail the exactions on the people. This one act will be equal to the performance of the ten thousand." The land tax of the district was then something more than one fifth of a taël of silver per *mow*.* A reduction was effected of nearly one half. The magistrate told his vision to the sage who had put him upon his present course of life. "Doubtless," said the old man, "to perform one single act like this, with perfect integrity of motive, may be equal to the performance of ten thousand minor acts; for, by lessening the taxes of a whole district, ten thousand people may be benefited." In a word, our Chinese had employed his ten talents to the best advantage. The fortuneteller had calculated that he would die in his fifty-third year; but he was already arrived at sixty-eight years of age, and was moreover quite well. Thus it was that the three great items of Chinese happiness, namely, "male progeny, official employment, and long life," were all enjoyed *in spite of fate*. The story seems to have been written for the express purpose of counteracting the general belief in the decrees of immutable destiny, and lessening the credit of astrologers.

The general proneness of the Chinese to super-

* About the eighth of an English acre, from which it would seem that rather more than ten shillings per acre is considered a high tax.

stitious practices (most of which pertain to the Taou sect) could not be more completely proved than by an account of the charms, talismans, and felicitous appendages hung up in houses, or worn about the person, specimens of which were sent home a short time since to the Royal Asiatic Society, by Mr. J. Morrison, a son of the late doctor.* It will be sufficient if we describe a few of these. Among the principal are "money swords," as they are called, consisting of a number of ancient copper coins, each with a square hole in the middle, fastened together over a piece of iron, shaped like a sword with a cross hilt. These are suspended at the heads of sleeping couches and beds, that the supposed guardianship of the sovereigns, in whose reigns the coin was issued, may keep away ghosts and evil spirits. They are chiefly used in houses or rooms where persons have committed suicide, or suffered a violent death; and sick people sometimes resort to them in the hope of hastening their recovery. Their efficacy is no doubt fully equal to that of a horseshoe nailed over a door, or any of those infallible devices formerly adopted in this country against witches and ghosts. The Chinese have commonly a firm belief in, and consequently a great dread of, the wandering spirits of persons who have come to an unfortunate end, which they denominate *kuei*. When Europeans first arrived in the country, their red or yellow hair, and high noses, were strongly opposed to the fair ideal of Chinese comeliness. Mothers and nurses pointed them out as ogres and devils to their children, and hence the present term for any Europeans, *fan-kuei*, "foreign ghost, spirit, or devil," with some allusion, perhaps, to their *wandering so far from their homes*.

In illustration of the Chinese belief in ghosts, and what may be styled "demoniacal possession," may

* Royal Asiatic Transactions, vol. iii., p. 285.

be adduced an occurrence which took place at Canton in 1817. The wife of an officer of government had occasioned the death of two female domestic slaves, from some jealous suspicions, it was supposed, of her husband's conduct towards the girls; and in order to screen herself from the consequences, she suspended the bodies by the neck with a view to its being construed into an act of suicide. As the parents of the girls appealed to the magistrate for satisfaction, bribes were offered, and with success, to stop the progress of inquiry; but the conscience of the woman tormented her to such a degree that she became insane, and at times personated the victims of her cruelty, or, as the Chinese supposed, the spirits of the murdered girls possessed her, and employed her mouth to declare her own guilt. In her ravings, she tore her clothes and beat her own person with all the fury of madness; after which she would recover her senses for a time, when it was supposed that the demons quitted her; but only to return with greater fury, which took place a short time previous to her death.

In her last fit she became worse than ever, and was confined to a room with an old woman servant. But the avenging demons, (according to the Chinese,) being incensed at this attempt to conceal guilt, possessed the old woman also, who, either from terror or sympathy, had become affected like her mistress. The latter died, and the affrighted husband endeavoured to quiet the distracted nurse, by telling her she should be maintained in one of the Budhist nunneries, where she would become at length absorbed into the divine nature of Fo. She consented to this, on condition that he would worship her, which he forthwith pretended to do. The demons, say the Chinese, speaking by the old woman's mouth, further insisted that the two daughters, who had assisted the mother in maltreating the girls, should also come and worship, which was accordingly done

and on the arrival of the woman at the place of her retirement, the souls of the murdered females, having been appeased by the foregoing occurrences, left her in possession of her perfect senses. It may be reasonably supposed that a train of circumstances like the preceding, in themselves sufficiently explicable on natural grounds, were magnified by ignorance and superstition into something preternatural.*

A common Chinese talisman† is the "hundred families' lock," to procure which a father goes round among his friends, and having obtained from a hundred different parties a few of the copper coins of the country, he himself adds the balance, to purchase an ornament or appendage fashioned like a lock, which he hangs on his child's neck, for the purpose of *locking* him figuratively to *life*, and making the hundred persons concerned in his attaining old age. Another charm worn by children is a figure of the *Ky-lin*, a fabulous animal supposed to have appeared at the birth of Confucius, and therefore ominous of promotion and good fortune to the young. On the fifth day of the fifth moon, sprigs and cuttings of the *Acorus calamus*, and a plant called by the Chinese *gae*, are placed at the doors of houses to prevent all manner of evil from entering. The "Peach charm" consists of a sprig of that tree covered with blossoms, which, at the new year, is placed at doorways for the same purpose as the foregoing. The *pa-kua*, or eight mystical diagrams of Fo-hy, cut in stone or metal, are often worn as charms; and the bottle-gourd, a curious species of the genus *cucurbitus* closely resembling a bottle, is represented in ornaments as an emblem of longevity. We have before stated that the dried gourd itself, hung round the waists of children living in boats, frequently saves

* Chinese Gleaner, p. 144.
† Royal Asiatic Transactions, *ut supra*

their lives, by floating them until picked up after they have tumbled overboard.

One might be led to conclude that the Chinese were generally a very happy people, could this only be inferred from the value which they set on long life. The thing may be partly explained, however, by the great reverence with which age is always treated, and by the fact, that old persons commonly enjoy an unusually great share of comparative ease and exemption from toil, by the services which both opinion and law impose on their juniors. The greatest favour and distinction that the emperor can bestow on one of his ministers is the word *show*, "long life," written in a peculiar manner with his own hand, and supposed, no doubt, to be one of the best promoters of longevity. Persons of the lowest class, who have attained to an unusual age, have not unfrequently been distinguished by the emperor; and Kien-loong, when himself a very old man, gave a solemn feast to all his subjects, of *every rank*, who had passed the usual term of human life! No doubt this solid foundation of their social and political system, on the patriarchal basis, has contributed to its steady duration.

The written spells which the Chinese sometimes use consist of mystical compounds of various characters, or words, in which astrology is generally introduced, with the eight diagrams of Fo-hy, the twenty-eight lunar mansions, the *five* planets, &c. Some of these spells are kept about the person, others are pasted on the walls of rooms. "Occasionally," observes Mr. Morrison, "they are used as cures for sick persons, by being either written on leaves which are then infused in some liquid, or inscribed on paper, burned, and the ashes thrown into drink, which the patient has to swallow." This is not much worse, however, than the *aurum potabile* of the old materia medica among ourselves. For some reason or other, bats (which the Chinese call

fei-shoo, "flying mice") are looked upon as good omens, and constantly depicted as an emblem of felicity on various objects of use or ornament. Even in *this*, perhaps, there is as much reason as in the Roman notion of learning the secrets of fate from the pecking of chickens, or in that zoological list of ill omens which Horace, either in jest or earnest, imprecates against the wicked—

> "Impios parræ recinentis omen
> Ducat, et prægnans canis, aut ab agro
> Rava decurrens lupa Lanuvino,
> Fetaque vulpes," &c.

The Chinese look upon rooks as unlucky birds, whose visits prognosticate visits still more unpleasant from the *mandarins*. There is, however, a species of white-necked crow, for which they have a high veneration, as was proved in the last embassy. A gentleman of the party had carried a gun with him, in one of those long walks which we were accustomed to take at the frequent points of sojourn. The unusual appearance of this crow, with a white cravat, led to its being for once considered as fair *game*, and the bird was shot. The occurrence was reported to the emperor's legate, who conducted the embassy, and from him an earnest request was conveyed to the ambassador that no more such birds might be killed. "But it was only a crow," was the natural answer. "Only a crow!" exclaimed the legate. "Of all the birds that fly it should have been spared, for it is a sacred animal." He then related a story respecting crows having once performed some essential public service, just as geese are said to have saved the Roman capitol. This shows, at least, the utility of being acquainted with the most trivial superstitions of a country.

But the strangest and most unaccountable of the Chinese superstitions, is what they denominate

foong-shuey—"wind and water," a species of geomancy, or a belief in the good or ill luck attached to particular local situations or aspects, which we had occasion to notice before, and which, among the more rational classes of the people, is admitted to be nonsensical. Before a house is built or a burial place selected, it is necessary to consult certain professors of the occult science, who, at the price of adequate fees, proceed with much solemnity to examine the situation. After frequently perambulating and examining the ground, and even deferring their decision for months, they will fix on some particular place. The lucky position of a grave is supposed to exercise some influence on the fortunes of a whole family; and if, after all the expense and trouble of consulting the cheats who profess the art, ill fortune rather than good should attend the parties, this is, of course, attributed to anything except the inefficiency of the *foong-shuey*. This term may in general be construed by the word *luck*, and it has been supposed that in a country like China, where nearly all long journeys are performed by water, "good wind and water," or, in other words, good luck on a journey, has by degrees come to signify good luck in every circumstance and condition of life.

It would seem scarcely possible that such fooleries as those above stated should meet with countenance or support in persons calling themselves Europeans; yet in 1821 a Portuguese of some local consideration in Macao contributed to the erection of a pagoda for improving the fortunes of the place! The following notice was exhibited, but it does not appear that the whole of the proposed scheme was ever accomplished. "The Chinese and foreign merchants have hitherto been prosperous, their wealth abounding, and the destinies of the place altogether felicitous. Of late, however, its fortunes have waxed lean, and the influence of the atmosphere been unlucky, so that the acquisition of riches

has become less certain. A proposal is accordingly made to erect a pagoda and a pavilion, in order to renovate and improve the commercial fortunes of the island. The plan has fortunately met with the concurrence of the Portuguese magistrate, who has offered one hundred dollars to assist in its execution. Leang-ta-tscuen, whose skill is universally acknowledged, and everywhere attended by incontestible proofs, has visited Macao, in order to fix on a proper spot. He declares that a lofty pavilion should be erected on the sea side, near the new village to the right of the temple of Ma-tsoo, and a high pagoda on the eastern arm of Monkey Island. He affirms that prosperity and riches will be the result—that both Chinese and strangers at Macao will share in the felicity. He has written a paper on the subject, and drawn out the plan, which has obtained the assent of the Portuguese magistrate; the permission of the *Keun-min-foo* (the Chinese magistrate of Macao) has also been graciously given. It is therefore resolved," &c.

The Chinese have a mode of divination by certain pieces of wood, in shape the longitudinal sections of a flattish oval. These are thrown by pairs, and according to the mode in which they turn up, a judgment is formed of any future event by consulting the interpretation afforded in a sibylline volume, which is hung up in the temple. If the throw, however, happens to be unlucky, they do not mind trying their chance *over again* until the answer is satisfactory. A plan of divination, of somewhat the same kind, is described by Tacitus in his account of the ancient Germans. "Sortium consuetudo simplex; virgam frugiferæ arbori decisam in surculos amputant, eosque notis quibusdam discretos super candidam vestem temere ac fortuito spargunt."*

* Germ. x.

CHAPTER XV.

LANGUAGE AND LITERATURE

Universal medium for communicating Ideas.—Chinese Roots or Radical Characters.—The elements of a philosophic Classification.—Written and spoken Languages.—Structure of Phrases.—Chinese Ethics.—Rules for Study.—Literary Habits.—Aphorisms.—Histories.—Chinese account of Europe.—Biographies.—Code of Civil Regulations.—European Translations.—Their Faults.

The written language of China realizes to a great extent the theory of a universal medium for the communication of ideas, as conceived by Bishop Wilkins, and methodised by him into an elaborate treatise which he presented to the Royal Society While the letters of our alphabet are mere symbols of *sounds*, the Chinese characters, or words, are symbols of *ideas*, and alike intelligible to the natives of Cochin-china, Japan, Loo-choo, and Corea, with those of China itself. The best practical illustration of a written character, common to several nations who cannot understand each other's speech, are the Arabic numerals common to all Europe. An Englishman, who could not understand what an Italian meant if he said *venti-due*, would comprehend him immediately if he wrote down 22. This advantage, which belongs to our *numerals* only, pertains to the *whole language* of the Chinese, and those other nations who use the same characters, without affixing to them the same pronunciation.

No connection or resemblance whatever is to be traced between the written language of China and

the Egyptian hieroglyphics. The former, indeed, is a much more artificial and ingenious system than the last, which had not advanced beyond the rude representations of visible objects; while the Chinese, although it seems to have *originated* in something of the same kind, is now anything but a collection of mere pictures. They have no less than six different forms of writing or printing, just as we have the black letter, the Roman, the italic, the written, and the running-hand forms. Indeed the Chinese running hand might very easily be taken for an alphabetic character; though it differs from most of these systems in being written in *perpendicular columns*, like the Manchow Tartar language.

The rumoured difficulties attendant on the acquisition of Chinese, from the great number and variety of the characters, are the mere exaggerations of ignorance, and so far mischievous as they are calculated to deter many from the pursuit, whose business takes them to the country, and would no doubt be greatly promoted by some practical acquaintance with its language. The roots, or original characters of the Chinese, (or what, by a species of analogy, may be called its *alphabet*,) are only 214 in number, and might indeed be reduced to a much smaller amount by a little dissection and analysis. To assert that there are so many thousand characters in the language, is very much the same thing as to say that there are so many thousand words in Johnson's Dictionary; nor is a knowledge of the *whole* at all more necessary for every practical purpose. than it is to get all Johnson's Dictionary by heart, in order to read and converse in English. Prèmare very correctly observes—neminem esse qui non possit libros legere et Sinicè componere, quande semel quatuor vel quinque millia litterarum (aut verborum) benè novit—"that there is nobody who might not read and write Chinese, after he had once acquired a good knowledge of 4,000 or 5,000 char

acters, or words." A *much smaller* number might, in fact, suffice; and it is worthy of remark that the entire number of *different* words, apart from repetitions, in the penal code translated by Sir George Staunton, was under 2,000.

The roots which we have mentioned serve, like our alphabet, for the arrangement of the words in the large Chinese Dictionary, compiled more than a hundred years since by order of the Emperor Kâng-hê; and so ingenious and lucid is the arrangement, that to a practised person there is little more difficulty in turning to a word than, among ourselves, in consulting Johnson. The main portion of Dr. Morrison's Chinese Dictionary is arranged on the same principle. *One* part, however, is on a different plan, which requires that the searcher after a word should know its *pronunciation* before he can find it. This (which is an attempt to imitate the European method) is by far less certain than the proper Chinese mode, which requires no knowledge whatever of the *sound* of a word, but only of its *composition;* and this is obvious to any person who knows the roots. These roots answer the purpose of our alphabet in lexicographic arrangement, and may be considered, besides, as the foundation of the *meaning* of each word to which they serve as root.

From the principle on which the written language has been constructed, there has ensued to it a remarkable property, which did not escape the penetration of the late Professor Rèmusat, in his paper on "the state of the natural sciences among the people of Eastern Asia." As the 214 roots or radical characters (whose combinations with each other form the whole language) singly represent or express the principal objects or ideas that men have occasion to communicate in the infancy of their knowledge, they comprise within their number the heads of *genera* and *classes* in nature, and thus afford the elements and means of a philosophical system of ar-

rangement. As their knowledge increased, "a fortunate instinct," as M. Rèmusat calls it, guided the framers of the language, and led them, instead of forming characters altogether new, to express new objects by the ingenious combination of those elementary symbols which they already possessed. Thus, for instance, among the roots we find *horse*, *dog*, *metal*, &c.; and the *addition* of some *other* significant symbol, expressive of some peculiar property or characteristic, serves to designate the different species comprised under these principal genera. In this manner, as M. Rèmusat observes, each natural object becomes provided with a binary denomination, inasmuch as the complex character is necessarily formed of two parts; one for the class, order, or genus, the other for the species or variety. Thus they express. *horse*, *horse-ass*, *horse-mule*; *dog*, *dog-wolf*, *dog-fox*; *métal*, *metal-iron*, *metal-copper*, *metal-silver*; the *elementary* or *generic* words, horse, dog, metal, being those under which the compounds are arranged in the dictionary.

"Thousands of terms have been thus compounded, and thousands more may be constructed in the same way; for the process by which they are created, and which is strictly analagous to the principle of the Linnæan nomenclature, is one which cannot be exhausted by repetition; and from this simple sketch it may be conceived how much aid the understanding and memory may gain by the employment of signs of this rational nature, in a subject of such immense compass, in which order and method constitute the first pledge of the progress of studies and the advancement of knowledge." M. Rèmusat goes on to show that the Chinese have not derived the advantage which they might to their science, from this happy constitution of their language; and that their naturalists have not made the progress which they should have done, in the course traced out for them by the lexicographers. For it must

be remembered that this systematic arrangement was a mere classification of written signs, brought together by the dictionary makers, and distributed by them according to the component and elementary parts, with a view solely to facilitating the search for them. Persons who could avail themselves of signs so judiciously contrived and arranged, and including within themselves a principle of order and the elements of analysis, might have been expected to perfect in their scientific labours what the mere etymology of the characters suggested to them: but without denying the decided superiority of the Chinese, in this respect, to the other people of Asia, they must be confessed to have made but an imperfect use of their opportunities and means. The whole essay of M. Rèmusat on this curious subject is deserving of perusal.

The highly artificial and philosophic structure of so singular a language entitles it to the attention of intelligent persons, as a part of the history of the human mind. But it has now other powerful claims to notice, from being the medium through which at least *four hundred millions* of mankind, occupying countries which exceed the united extent of all Europe, communicate their ideas. With the growth of our commerce, and of our Protestant missions, the value and importance of its acquisition may no doubt increase in estimation. By only knowing how to write a few hundred Chinese words, a man can make himself understood over an extent of 2,000 miles of latitude, from Japan in the north to Cochinchina in the south. As a portion of general literature alone, and without one half of the practical importance which attaches to it among ourselves, the French have long since thought it worthy of the endowment of a professor's chair; and that nothing of the kind as yet exists in England is remarkable.

The uniformity in the *written* character has not prevented the existence of very considerable diver-

sities in the *oral* languages of the different provinces of China, and especially the province of Fokien. These diversities are analagous to the different pronunciation given to the same numerals in the various countries of Europe. To adduce the example with which we set out, the number 22, which an Italian calls *venti-due*, a Frenchman pronounces *vingt-deux*; and, in like manner, the Chinese numerals expressive of the same amount are read *urh-she-urh* by the native of Peking, while the Canton man calls them *ee-shap-ee*, although both *write* them exactly alike. It is in this way that the universality of the Chinese language extends only to the written character, and that the natives of the two extremities of the empire, who read the same books, and understand each other perfectly on *paper*, are all but mutually unintelligible in *speech*.

There is, however, one mode of pronouncing the written language, that of Peking, or of the court, which is universally adopted in official translations, and in the intercourse of the higher orders all over the empire. This has been termed by Europeans the mandarin dialect, and is called in Chinese *Kuan-hua*, which has the same meaning; and this of course is the proper dialect for strangers to learn, as being of most extensive use. The total number of different syllables does not much exceed four hundred, but these are varied by intonations sufficiently distinct to the ear of a native, so as to treble or quadruple that amount. The danger of misunderstanding in *speech* (for there can be none in *writing*) is obviated by joining two words together to express any particular object, thus making in fact a word of two syllables. For instance, in the oral language *foo* means "father," but it also means "an axe;" and the possibility of the equivoque is prevented by saying, in the first instance, *foo-tsin*, (father relation,) and, in the second, *foo-tow*, (axe-head,) which circumstance tends to render the written language much more brief and con-

cise than the spoken, as it has no need of such expletives.

The Chinese attach much consideration to the graphic beauty of their written character, and make use of inscriptions for ornamental purposes, as may be often seen on the specimens of porcelain brought to this country. The advantage of simplicity (and a very great advantage it is) constitutes the merit of our alphabetic writing; but that of variety and picturesque effect may fairly be claimed by the Chinese.* The importance of kalligraphy as an accomplishment, is naturally esteemed more highly among them than it is in Europe; and large ornamental inscriptions, or labels, are frequently exchanged as remembrances among friends, and used as pictures are among us, for purposes of taste and decoration. The two most usual forms of their character are, first, that in which books are commonly printed,† and which being stiff and inelegant, lays claim only to clearness and accuracy; secondly, that in which all papers of consequence are written, and which combines correctness with elegance. The last is at once the most useful and the most studied form of the Chinese character. To attain skill in writing it, is more or less the aim of every educated Chinese; and to impart that skill, is the object of a work whose rules have been translated, and its examples given in a series of lithographic plates, in the Royal Asiatic Transactions.‡

Nothing can exceed the neatness and beauty of Chinese notes and letters, which are generally written on ornamental paper of various colours, called by them "flowered leaves." They sign with a ci-

* "The almost infinite variety of forms which the Chinese symbolical character is capable of receiving, is certainly favourable to the beauty, and, it may almost be said, picturesque effect of such inscriptions."—*Staunton.*

† Analagous to our Roman type.

‡ Vol. i., p. 304.

stitious practices (most of which pertain to the Taou sect) could not be more completely proved than by an account of the charms, talismans, and felicitous appendages hung up in houses, or worn about the person, specimens of which were sent home a short time since to the Royal Asiatic Society, by Mr. J. Morrison, a son of the late doctor.* It will be sufficient if we describe a few of these. Among the principal are "money swords," as they are called, consisting of a number of ancient copper coins, each with a square hole in the middle, fastened together over a piece of iron, shaped like a sword with a cross hilt. These are suspended at the heads of sleeping couches and beds, that the supposed guardianship of the sovereigns, in whose reigns the coin was issued, may keep away ghosts and evil spirits. They are chiefly used in houses or rooms where persons have committed suicide, or suffered a violent death; and sick people sometimes resort to them in the hope of hastening their recovery. Their efficacy is no doubt fully equal to that of a horseshoe nailed over a door, or any of those infallible devices formerly adopted in this country against witches and ghosts. The Chinese have commonly a firm belief in, and consequently a great dread of, the wandering spirits of persons who have come to an unfortunate end, which they denominate *kuei*. When Europeans first arrived in the country, their red or yellow hair, and high noses, were strongly opposed to the fair ideal of Chinese comeliness. Mothers and nurses pointed them out as ogres and devils to their children, and hence the present term for any Europeans, *fan-kuei*, "foreign ghost, spirit, or devil," with some allusion, perhaps, to their *wandering so far from their homes*.

In illustration of the Chinese belief in ghosts, and what may be styled "demoniacal possession," may

* Royal Asiatic Transactions, vol. iii., p. 285.

tirely of *matting*. It has been already mentioned that, in the year 1822, the whole of the European factories were laid in ashes by a fire which originated in a small shop, and which, before it had run its course, destroyed a very considerable portion of the city. Some of these fires are doubtless the work of incendiaries, who hope to profit in the confusion; but a large number must also be considered as the results of that stupid belief in fatalism, which tends to paralyze effort and to banish caution. Hence the thriving trade that is carried on by fortunetellers and calculators of destiny.

That the wiser and better portion of the Chinese, however, are occasionally above the influence of this grovelling sentiment, seems proved by the existence of a treatise in their language, wherein it is shown that a man may "lay the foundation of his own destiny;" or, in other words, that *conduct is fate*. The author relates, that being left by the death of his father without a guide at a very early age, he consulted an old man with a long beard, who professed the art of divination. This person told him that in such a year he should attain a scholar's decree at the public examination within his district, and that, in some other year, he should succeed at the higher trial in the provincial capital. It so happened that these events occurred as they had been predicted, and his faith became accordingly confirmed in the skill of the soothsayer who next informed him, after predicting the various vicissitudes of his remaining life, that he would die at the age of fifty-three, on a particular day, and at a particular hour of the morning. Being confirmed in the belief that his whole course of existence was thus fixed by an immutable decree of fate, he became henceforward quite indifferent to active effort and exertion of every kind. It chanced that he fell in, some time after, with a sage of a very different description, who took him to task for his apathy. "Can a man,

here is so little of what can strictly be called grammatical rules, the proper way to teach is by *examples* rather than precepts; and this is what Prèmare has done, illustrating the subject by quotations from the best works in the native character. It is a pity, however, in the present disuse of the learned languages, that the work had not been printed in English rather than in Latin, with a view to general utility. It consists of two parts, with an introduction giving a general account of Chinese books, and the method of studying them, and a treatise on the character and its pronunciation. The first part is on the ordinary language of conversation and popular books.; the second treats of the more abstruse and condensed style of scholastic composition and of the ancient books, which forms, however, the basis of the popular language. With the aid of Prèmare's work, and Dr. Morrison's Dictionary, it is in the power of any one to learn Chinese, as far as *books only* are concerned. To be able to converse in it, he must go to China.

Dr. Morrison has given a curious account, from original sources, of the rules which govern native scholars in the prosecution of their studies. The first thing needful is "to form a resolution," and this resolution is valuable in proportion as it is firm and persevering. It is received as a maxim, that "the object on which a determined resolution rests *must* succeed." The student is directed to keep by him a commonplace book, and daily to record in it what he reads; then at intervals of ten or twenty days to recapitulate and con over what he has before learned; "thus the lover of learning daily acquires new ideas, and does not lose those he already possesses." The scholar who does not rouse all his energies is told to consider how he is to get through his task, when locked up with nothing but pencils, ink, and paper, at the public examination. "Should

a theme be there given him which he cannot manage let him reflect what his distress will be."

When a man is reading a particular section of a work, he is directed, in this treatise *on the conduct of the understanding*, to give up his whole mind to that alone, and on no account to let it be diverted for the time by any other subject. "A caldron of water, for example, after fire has been long applied to it, will at last boil; but if in the mean while you change the water and put on fresh, though a great deal of water will be partially heated, none will be made boiling hot. I have seen," says the Chinese writer, "those men who covet much, and devote themselves to universal knowledge. When they read they presume on the quickness of their genius, and section after section passes before their eyes; but when do they ever really apply their minds to the subject? Better a little and fine than much and coarse. The ancient military rule makes the power of an army to consist in its perfect training and not in its mere numbers. I deem the same to be true in reference to reading."

In study, a main point is to get rid of extraneous thoughts, and matters foreign to the object before one. The illustration of this subject of feeding the intellect is taken from the feeding of the body. "If a man's stomach," they say, "is filled with coarse and ordinary food, he can swallow nothing more, though the most precious dainties be placed before him. In reading, the same is true of the mixed and vulgar thoughts of everyday life which occupy and fill up the mind." Another important point is the ready *application* of acquired knowledge. A certain class of men, though they have read a great many books, are incapable of transferring and using the stores they have laid up. "There is one convenient rule (it is added) for a man who has many worldly affairs to attend to: it is to make a good selection of a volume of ancient literature, and another of modern compo-

fei-shoo, "flying mice") are looked upon as good omens, and constantly depicted as an emblem of felicity on various objects of use or ornament. Even in *this*, perhaps, there is as much reason as in the Roman notion of learning the secrets of fate from the pecking of chickens, or in that zoological list of ill omens which Horace, either in jest or earnest, imprecates against the wicked—

> "Impios parræ recinentis omen
> Ducat, et prægnans canis, aut ab agro
> Rava decurrens lupa Lanuvino,
> Fetaque vulpes," &c.

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be adduced an occurrence which took place at Canton in 1817. The wife of an officer of government had occasioned the death of two female domestic slaves, from some jealous suspicions, it was supposed, of her husband's conduct towards the girls; and in order to screen herself from the consequences, she suspended the bodies by the neck with a view to its being construed into an act of suicide. As the parents of the girls appealed to the magistrate for satisfaction, bribes were offered, and with success, to stop the progress of inquiry; but the conscience of the woman tormented her to such a degree that she became insane, and at times personated the victims of her cruelty, or, as the Chinese supposed, the spirits of the murdered girls possessed her, and employed her mouth to declare her own guilt. In her ravings, she tore her clothes and beat her own person with all the fury of madness; after which she would recover her senses for a time, when it was supposed that the demons quitted her; but only to return with greater fury, which took place a short time previous to her death.

In her last fit she became worse than ever, and was confined to a room with an old woman servant. But the avenging demons, (according to the Chinese,) being incensed at this attempt to conceal guilt, possessed the old woman also, who, either from terror or sympathy, had become affected like her mistress. The latter died, and the affrighted husband endeavoured to quiet the distracted nurse, by telling her she should be maintained in one of the Budhist nunneries, where she would become at length absorbed into the divine nature of Fo. She consented to this, on condition that he would worship her, which he forthwith pretended to do. The demons, say the Chinese, speaking by the old woman's mouth, further insisted that the two daughters, who had assisted the mother in maltreating the girls, should also come and worship, which was accordingly done

of respectable independence at the public charge Schools and colleges for the instruction of the people in his doctrines continue to flourish in every part of the empire; a competent acquaintance with his writings continues to be an indispensable qualification for civil office.

"Under the influence of such institutions, it is by no means surprising that the proportion of the community exclusively devoted to letters should be much greater in China than it is in any other country on the surface of the globe. It is so great as to constitute of itself a distinct class in the state. It is the first and most honourable of the four classes into which the body of the people is considered as divisible according to the Chinese political system; namely, the literary, the agricultural, the manufacturing, and the mercantile. . . . . The advantages arising from so extensive a diffusion of a familiar acquaintance with what may be called their Confucian or classical literature will more fully appear when the nature of that moral system is considered which it is the uniform tendency of its pages to inculcate. Du Halde informs us, that 'Tout la doctrine de ce philosophe tendoit à redonner à la nature humaine ce premier lustre, et cette première beauté qu'elle avoit reçue du ciel, et qui avoit été obscurcie par les ténèbres de l'ignorance, et par la contagion des vices. Il conseilloit, pouvoir y parvenir, d'obéir au seigneur du ciel, de l'honorer et de la craindre, d'aimer son prochain comme soi-même, de vaincre ses penchans, de ne prendre jamais ses passions pour règle de sa conduite, de les soumettre à la raison, de l'écouter en toutes choses, de ne rien faire, de ne rien dire, de ne rien penser même, qui lui fût contraire.'

"In the same spirit is the statement or summary of the Chinese moral system, which the emperor of China in 1713 directs to be given by his ambassadors to the Russian government. 'If you are asked what we principally esteem and reverence in China, you

may thus reply: In our empire fidelity, filial piety, charity, justice, and sincerity are esteemed above all things. We revere and abide by them: they are the principles upon which we administer the empire and as well as govern ourselves. We likewise make sacrifices and oblations; we pray for good things, and we deprecate evil things; but if we did not act honestly, if we were not faithful, pious, charitable, just, and sincere, of what avail would be our prayers and sacrifices?' The universal veneration of the Chinese for the memory of Confucius is of itself no small homage to the excellence of his doctrines. It is strikingly manifested by the special dedication of temples to his honour in all the chief cities of the empire. . . . . In the lateral galleries of these temples a number of smaller tablets are generally displayed, on which are carefully recorded the names and virtues of such of the deceased inhabitants of the district as were deemed to deserve, either on account of their private worth or their public services, this posthumous distinction. . . . . Everything that is subservient to or connected with literary objects in China is carried to a degree of refinement, and blended with all their ordinary concerns of pleasure and of business, in a way that may seem extravagant and puerile;* but such an attachment to the forms and instruments by which knowledge is conveyed could hardly exist altogether independently of a regard for their object."†

In a general classification of the literature of the country, those sacred or canonical works, which have already been briefly described in the twelfth chapter, must of course be placed at the head of the list. The term *king*, which means a sacred book, has been usurped by the Budhists and sectaries of

* Their customary reverence for letters is such, that they will not tread upon written or printed paper.

† Miscellaneous Notices, part ii., p. 6

the Egyptian hieroglyphics. The former, indeed, is a much more artificial and ingenious system than the last, which had not advanced beyond the rude representations of visible objects; while the Chinese, although it seems to have *originated* in something of the same kind, is now anything but a collection of mere pictures. They have no less than six different forms of writing or printing, just as we have the black letter, the Roman, the italic, the written, and the running-hand forms. Indeed the Chinese running hand might very easily be taken for an alphabetic character; though it differs from most of these systems in being written in *perpendicular columns*, like the Manchow Tartar language.

The rumoured difficulties attendant on the acquisition of Chinese, from the great number and variety of the characters, are the mere exaggerations of ignorance, and so far mischievous as they are calculated to deter many from the pursuit, whose business takes them to the country, and would no doubt be greatly promoted by some practical acquaintance with its language. The roots, or original characters of the Chinese, (or what, by a species of analogy, may be called its *alphabet*,) are only 214 in number, and might indeed be reduced to a much smaller amount by a little dissection and analysis. To assert that there are so many thousand characters in the language, is very much the same thing as to say that there are so many thousand words in Johnson's Dictionary; nor is a knowledge of the *whole* at all more necessary for every practical purpose, than it is to get all Johnson's Dictionary by heart, in order to read and converse in English. Prèmare very correctly observes—neminem esse qui non possit libros legere et Sinicè componere, quando semel quatuor vel quinque millia litterarum (aut verborum) benè novit—"that there is nobody who might not read and write Chinese, after he had once acquired a good knowledge of 4,000 or 5,000 char

foong-shuey—"wind and water," a species of geomancy, or a belief in the good or ill luck attached to particular local situations or aspects, which we had occasion to notice before, and which, among the more rational classes of the people, is admitted to be nonsensical. Before a house is built or a burial place selected, it is necessary to consult certain professors of the occult science, who, at the price of adequate fees, proceed with much solemnity to examine the situation. After frequently perambulating and examining the ground, and even deferring their decision for months, they will fix on some particular place. The lucky position of a grave is supposed to exercise some influence on the fortunes of a whole family: and if, after all the expense and trouble of consulting the cheats who profess the art, ill fortune rather than good should attend the parties, this is, of course, attributed to anything except the inefficiency of the *foong-shuey*. This term may in general be construed by the word *luck*, and it has been supposed that in a country like China, where nearly all long journeys are performed by water, "good wind and water," or, in other words, good luck on a journey, has by degrees come to signify good luck in every circumstance and condition of life.

It would seem scarcely possible that such fooleries as those above stated should meet with countenance or support in persons calling themselves Europeans; yet in 1821 a Portuguese of some local consideration in Macao contributed to the erection of a pagoda for improving the fortunes of the place! The following notice was exhibited, but it does not appear that the whole of the proposed scheme was ever accomplished. "The Chinese and foreign merchants have hitherto been prosperous, their wealth abounding, and the destinies of the place altogether felicitous. Of late, however, its fortunes have waxed lean, and the influence of the atmosphere been unlucky, so that the acquisition of riches

the sense. The same forms are observed in expounding the laws generally; for the Chinese have a maxim, that "to make the laws universally known, is the best way to prevent their violation."

Among their other moral and didactic works, they have collections of detached sentences and aphorisms, of which they are extremely fond, and for the expression of which their language is singularly well adapted. Pairs of these sentences, displaying a parallelism of construction, as well as meaning, and written in a fine character on ornamental labels, are a frequent decoration of their dwellings and temples. There is a work in a single volume called *Ming-sin paon-kien*, "A precious Mirror to throw light on the Mind," being in fact a dictionary of quotations, filled with such extracts from various works, and therefore very useful to a learner. The favourite sayings and proverbs of all nations are among the best sources of information respecting their real character and condition; and with this view the reader is presented below with a collection, which has been made without any regard to arrangement or order:—

"1. A wise man adapts himself to circumstances, as water shapes itself to the vessel that contains it.
2. Misfortunes issue out, where diseases enter in —at the mouth.
3. The error of one moment becomes the sorrow of a whole life.
4. Diseases may be cured, but not destiny.
5. A vacant mind is open to all suggestions, as the hollow mountain returns all sounds.
6. When the tree is felled, its shadows disappear (Desertion of the great by their parasites.)
7. He who pursues the stag regards not hares.
8. To be afraid of leaving a track, and yet walk upon snow.
9. If the roots be left, the grass will grow again.

(Reason given for exterminating a traitor's family.)

10. Relaxation above produces remissness below (In authority.)
11. The gem cannot be polished without friction, nor man perfected without adversity.
12. What is told in the ear is often heard a hundred miles off.
13. Ivory is not obtained from rat's teeth. (Said in contempt.)
14. A wise man forgets old grudges.
15. Riches come better after poverty than poverty after riches.
16. A bird can roost but on one branch; a mouse can drink no more than its fill from a river. (Enough is as good as a feast.)
17. When the pool is dry, the fish will be seen. (When accounts are settled, the balance of profits will appear.)
18. You cannot strip two skins off one cow. (There is a limit to extortion.)
19. Who swallows quick can chew but little. (Applied to learning.)
20. What cannot be told had better not be done.
21. The torment of envy is like a grain of sand in the eye.
22. He who wishes to rise in the world should veil his ambition with the forms of humility.
23. Extreme delight produces its contrast.
24. The gods cannot help a man who looses opportunities.*
25. Dig a well before you are thirsty. (Be prepared against contingencies.)
26. Sweet words are poison; bitter words, physic. (Flattery and reproof.)

* "Pour être grand homme, il faut savoir profiter de toute sa fortune."—*Rochefoucauld.*

sities in the *oral* languages of the different provinces of China, and especially the province of Fokien. These diversities are analagous to the different pronunciation given to the same numerals in the various countries of Europe. To adduce the example with which we set out, the number 22, which an Italian calls *venti-due*, a Frenchman pronounces *vingt-deux*; and, in like manner, the Chinese numerals expressive of the same amount are read *urh-she-urh* by the native of Peking, while the Canton man calls them *ee-shap-ee*, although both *write* them exactly alike. It is in this way that the universality of the Chinese language extends only to the written character, and that the natives of the two extremities of the empire, who read the same books, and understand each other perfectly on *paper*, are all but mutually unintelligible in *speech*.

There is, however, one mode of pronouncing the written language, that of Peking, or of the court, which is universally adopted in official translations, and in the intercourse of the higher orders all over the empire. This has been termed by Europeans the mandarin dialect, and is called in Chinese *Kuan-hua*, which has the same meaning; and this of course is the proper dialect for strangers to learn, as being of most extensive use. The total number of different syllables does not much exceed four hundred, but these are varied by intonations sufficiently distinct to the ear of a native, so as to treble or quadruple that amount. The danger of misunderstanding in *speech* (for there can be none in *writing*) is obviated by joining two words together to express any particular object, thus making in fact a word of two syllables. For instance, in the oral language *foo* means "father," but it also means "an axe;" and the possibility of the equivoque is prevented by saying, in the first instance, *foo-tsin*, (father relation,) and, in the second, *foo-tow*, (axe-head,) which circumstance tends to render the written language much more brief and con-

acters, or words." A *much smaller* number might, in fact, suffice; and it is worthy of remark that the entire number of *different* words, apart from repetitions, in the penal code translated by Sir George Staunton, was under 2,000.

The roots which we have mentioned serve, like our alphabet, for the arrangement of the words in the large Chinese Dictionary, compiled more than a hundred years since by order of the Emperor Kâng-hy, and so ingenious and lucid is the arrangement, that to a practised person there is little more difficulty in turning to a word than among ourselves, in consulting Johnson. The main portion of Dr. Morrison's Chinese Dictionary is arranged on the same principle. *One* part, however, is on a different plan, which requires that the searcher after a word should know its *pronunciation* before he can find it. This (which is an attempt to imitate the European method) is by far less certain than the proper Chinese mode, which requires no knowledge whatever of the *sound* of a word, but only of its *composition;* and this is obvious to any person who knows the roots. These roots answer the purpose of our alphabet in lexicographic arrangement, and may be considered, besides, as the foundation of the *meaning* of each word to which they serve as root.

From the principle on which the written language has been constructed, there has ensued to it a remarkable property, which did not escape the penetration of the late Professor Rèmusat, in his paper on "the state of the natural sciences among the people of Eastern Asia." As the 214 roots or radical characters (whose combinations with each other form the whole language) singly represent or express the principal objects or ideas that men have occasion to communicate in the infancy of their knowledge, they comprise within their number the heads of *genera* and *classes* in nature, and thus afford the elements and means of a philosophical system of ar-

67. A truly great man never puts away the simplicity of the child.
68. To obtain *one* leads to wishing for *two*. (*Enough* is always something more than a man possesses.
69. Lookers on may be better judges of the game than the players.
70. The best thing is to be respected, and the next to be loved; it is bad to be hated, but worse still to be despised.
71. A fat hen makes fat chickens. (A rich master has sleek servants.)
72. The poor cannot contend with the rich, nor the rich with the powerful.
73. The man in boots does not know the man in shoes. (Boots are the official and full dress.)
74. Good fortune is a benefit to the wise, but a curse to the foolish.
75. While at their ease, men burn no incense; but when trouble comes, they clasp the feet of Fo.
76. A man's words are like an arrow, straight to the mark; a woman's are like a broken fan.
77. Domestic failings should not be published abroad.
78. A good action goes not beyond the doors; a bad one is carried a hundred leagues.
79. Virtue is sought for in a wife; beauty in a handmaid.
80. A foolish husband fears his wife; a prudent wife obeys her husband.
81. If the upper beam be crooked, the lower will be awry. (Effect of example in superiors.)
82. Obsequiousness makes friends; candour breeds dislike.
83. One lash to a good horse; one word to a wise man.
84. He who does not soar high will suffer the less by a fall.
85. The grass endures but one season; man lasts but one generation.

86. The drunkard's fault is not the wine's, but his own. (Drunkenness cannot be pleaded in extenuation.)
87. The man who combats himself will be happier than he who contends with others.
88. Sleepiness in an old man, and wakefulness in a young one, are bad symptoms. (Medical axiom.)
89. The fish dwell in the depth of the waters, and the eagles in the sides of heaven; the one, though high, may be reached with the arrow, and the other, though deep, with the hook; but the heart of a man at a foot distance cannot be known.*
90. It is equally criminal in the emperor and his subject to violate the LAWS.
91. Let every man sweep the snow from before his own doors, and not busy himself about the frost on his neighbour's tiles.
92. In a field of melons, do not pull up your shoe; under a plum tree do not adjust your cap. (Be careful of your conduct under circumstances of suspicion.)
93. A man need only correct himself with the same rigour that he reprehends others; and excuse others with the same indulgence that he shows to himself.
94. Though the life of man be short of a hundred years, he gives himself as much pain and anxiety as if he were to live a thousand.
95. By nature all men are alike; but by education widely different."

Some of the ordinary expressions of the Chinese are pointed and sarcastic enough. A blustering harmless fellow they call a "paper tiger." When man values himself overmuch, they compare him to "a rat falling into a scale, and weighing itself."

* Dr. Milne remarked the similitude to Proverbs, xxv. 3. "The heaven for height, and the earth for depth, and the heart of kings is unsearchable."

Overdoing a thing, they call "a hunchback making a bow." A spendthrift they compare to "a rocket," which goes off at once. Those who expend their charity on remote objects, but neglect their family, are said to "hang a lantern on a pole," which is seen afar, but gives no light below.

But to return to their regular literature, of which histories may be said to occupy the *second* class, after the sacred, moral, and didactic works. There is a continuous history of China, from the earliest ages down to the conclusion of the *Yuen* or Mongol Tartar dynasty, called the "Twenty-one historians," consisting of nearly three hundred of those *brochures*, or thin volumes stiched with silk, about ten of which are generally contained in a folding case. We shall treat of printing under the head of arts hereafter, but may observe incidentally in this place, that the early invention of this art, in the tenth century, just five hundred years before it was known in Europe, was a circumstance that tended to multiply and preserve the Chinese annals, and to afford abundant materials to the writers of later times. Yet we should search in vain in their histories for anything beyond a barren chronicle of facts and dates. Trains of reasoning and lessons of political philosophy can scarcely be looked for in a country, the theory of whose government has always been despotic, however tempered by other circumstances. "Instead of allowing," observes Mr. Gutzlaff very correctly, "that common mortals had any part in the affairs of the world, they speak only of the emperors who then reigned. They represent them as the sources from which the whole order of things emanated, and all others as mere puppets who moved at the pleasure of the autocrat. This is truly Chinese; the whole nation is represented by the emperor, and absorbed in him."*

The same writer quotes a native authority in support of that skepticism regarding the earlier or

mythological periods of Chinese history, which we took upon ourselves to express in the fifth chapter. "Who," inquires Yang-tsze, "knows the affairs of remote antiquity, since no authentic records have come down to us? He who examines these stories will find it difficult to believe them, and careful scrutiny will convince him that they are without foundation. In the primeval ages no historical records were kept. Why, then, since the ancient books that described those times were burned by the first emperor of the *Tsin* dynasty, (about 200 B.C.,) should we misrepresent those remote ages, and satisfy ourselves with vain fables?" The inconsistencies contained in the early relations destroy the credit of the whole, and prove them to have been in a great measure like the mythology of other countries, the inventions or improvements of after times.

Perhaps there is no portion of Chinese literature so little interesting to us as its *barren annals*, in which the principal events recorded are the successions of long lists of sovereigns, and the mere domestic chronicles of a country which has always had less connection with the rest of the world than any other empire of the same extent. There is some reason, therefore, for the opinion already quoted of Prèmare, who placed Chinese historians at the bottom of their list of writers, "not because they write worse than others, but because he did not much care to know the events which they relate." In our own opinion, the only readable Chinese chronicle is the *San-kuo-chy*, or "History of the Three States," comprising that period of its annals when the monotony of universal dominion was broken by the contests of several independent chiefs for the sovereignty. This work, however, is rather to be viewed in the light of a historical romance than as a mere matter of record, though the speeches which are put into the mouths of its heroes and actors are quite as likely to be gen-

* Chinese Repository, vol. iii., p. 57

uine as those which we meet with in Livy, and other ancient writers of Europe.

The interest of Chinese history, to a foreigner, is most engaging when the country is involved in contests with the Tartars, or subjected by their invasions. "The struggle," observes Mr. Gutzlaff, "against the Tartar hordes on the north and west became very violent during the Tâng and Soong dynasties, and ended in the submission of the whole of China to the Mongols about A.D. 1280. This period is highly interesting. Chinese writers have dwelt much upon the reigns of the emperors (of their own nation) who held the throne during these times of commotion, and we find in their works abundant materials for a history of the period. But for composing a history of the Mongol dynasty, we ought to have recourse to foreign helps; as the Chinese writers say comparatively little respecting it. They consider the family which then reigned as usurpers, sprung from the barbarians who first laid waste the celestial empire, and then trampled the 'flowery nation' under foot. Kublai, however, has his biographers and historians among the Chinese, but none of them equal Marco Polo, the Venetian traveller, in the interest of their narratives. To make ourselves acquainted with the *Ming* dynasty, (the native race which expelled the Mongols,) the Chinese can afford us one work of more than sixty volumes."

They cannot yet publish their observations upon the present dynasty, which a second time expelled the native sovereigns, and established the dominion of the Manchow Tartars. A manuscript work called *Tong-hua-lo*, containing the reigns of the three first emperors, is written in the same style as the annals of the empire under the preceding dynasties; but not being committed to the press, on account of the risk in which it might involve those concerned, the copies are of course scarce and expensive. As a specimen of the style in which Chinese works

sometimes notice foreign countries, the following passage from the above history may be adduced:—"European navigators calculate their distances by degrees,* as the Chinese do by watches. The Europeans coming to China sail first eighty degrees in a southerly course, until they reach the Cape of Storms, and thence steer in a northerly direction until they arrive at the limits of the province of Quang Tong. This is a voyage of six months or more, during which they see no land.

"There is also a mode of communicating from Europe with China by land, but as the kingdom of Russia intervenes, and is difficult of access, the route by sea is always preferred. Russia is about 12,000 *ly* distant from Peking. It is bounded on the other sides by Europe and Turkey . . . . . The climate to the north is so very cold, that although it is understood that those parts were formerly inhabited, travellers meet with no traces of natives at present, and they are supposed to have perished. The woods are very extensive, and the snow lies many fathoms deep. They have old accounts of mountains of ice in the northern seas, some thousand cubits high, which, though they have been disbelieved, may perhaps be entitled to credit."†

One of the most singular records of the Chinese, and a rare exception to the anti-social spirit which generally prevails in their foreign policy, is that account of the embassy from Kâng-hy (the second emperor of the reigning dynasty, and perhaps the most enlightened monarch that ever ruled the country) to the Khan of the Tourgouth Tartars, then situated between the Caspian Sea and the borders of Russia Proper. The work has been translated by Sir George Staunton, and the best summary of it may be given in his own words. "The ambassador

* The divisions of the globe, according to our method, were taught the Chinese by the Jesuits, and have been adopted by them.

† Staunton's Miscellaneous Notices, vol. i., p. 60.

commences his narrative with the relation of some particulars immediately concerning himself: he then gives at length the instructions he had received from his sovereign, and afterward proceeds in the form of a journal to detail the observations that occurred upon his route, his intercourse and conversations with the several public authorities among the Russians and Tourgouths with whom he communicated, more especially with Prince Gagarin, the then governor general of Siberia, and with Ayuke, the Tourgouth khan or sovereign; and he concludes with a recapitulation of the whole, in the form of an official report to his sovereign of his proceedings.

"The mission, the particulars of which are thus recorded, was undoubtedly a singular and remarkable event in Chinese history. The appointment of a deputation consisting of several official persons with a suitable train, to proceed upon a laborious and in some degree hazardous expedition to the distance of some thousand miles, and through the territories of a powerful neighbour with whom they had but little previous intercourse, and that not always of the most amicable nature, certainly seems to bespeak the existence of a spirit of enterprise, and more enlarged and enlightened views in the government of China at that period, than we should probably have looked for at any time in that of an Asiatic nation.

"But in whatever respect the policy which suggested the mission may be considered to have been unusual and out of ordinary course in China, the narrative at least is perfectly Chinese both in its style and sentiments: the national spirit and character pervades it throughout, and will be obvious to every reader. It is possibly true that precisely such mission would not have been sent under any other circumstances, or at any other period of the Chinese history: but there is nothing either in the conduct of the mission, or in the narrative of it, which any Chi-

nese or Tartar officer of ordinary attainments at the present day might not equally have done or written and the whole transaction seems to have obtained the unequivocal sanction and approbation of the government, the narrative having been published early in the next reign, under the emperor's special authority, and a copy of it deposited in the imperial library at Peking, as appears from its title being duly registered in the Chinese printed and published catalogues of that collection.*

"In addition to the circumstances which thus authenticate the work, and give it a certain degree of authority, as an exemplification of the maxims of Chinese policy, we have the advantage also of being able to put the author's fidelity to the test, by comparing his statements and notices on passing objects with those of Mr. Bell (of Antermony) in his account of a nearly contemporary expedition by a similar route; and it is certainly satisfactory to remark that there is a very general coincidence..... The descriptions of the scenery, inhabitants, and remarkable objects which were seen in the course of the route, it must be confessed, are very meager and unsatisfactory; but they derive some incidental interest from the novelty of the quarter from whence they proceed; besides which, the form of narration which the writer has adopted has led him to describe the manners, customs, and notions of his own countrymen, as frequently as those of the people whom he visits, a peculiarity which may, perhaps, add little to the value of his work to Chinese readers, but which cannot be unacceptable to us, to whom China is naturally an object of greater curiosity and interest than Tartary or Siberia."

Of the history of individuals, or *biography*, which the Chinese themselves call *Sing-heo*, "the study of

* The fact, that there is a printed and published catalogue of the Emperor of China's library, within the reach of any purchaser, is more than might have been expected

names," they possess a great variety, and at the head of these, as the oldest in date and estimation, may be instanced the *Lun-yu*, or Discourses of Confucius, a work which, we have already observed, is in plan not unlike our own Boswell. There is a modern biographical work called *Sing-poo*, in no less than *one hundred and twenty* volumes, comprising the lives of eminent men and women, but withal a dull compilation, and deficient in interest and animation. The art of printing has put the Chinese in possession of as voluminous and cheap a literature as any people in the world; though the difference in the standards of intellect and taste render much of this but little calculated to please European taste, or satisfy European intellect. It is for this reason that very few Chinese works can bear to be translated in detail, and that the best way of making their general literature known is by short summaries or abstracts.

Whatever their ignorance may be of matters extraneous to their empire, the numerous and extensive *statistical* works which they possess, demonstrate that the Chinese have a very detailed and accurate knowledge of their own country. The principal of these, Ta-tsing Ye-tung-chy, "a complete account of the Ta-tsing empire," consists of two hundred and forty volumes, giving particulars of the population, the geography, revenues, magistracy, and other details of every province of China Proper, as well as an account of Chinese Tartary. Every province, too, has its own separate history in print, comprising particulars of its productions, manufactures, eminent persons, and everything that can interest those connected with it; so that the ignorance of the Chinese cannot be truly stated with reference to their own vast empire, exceeding as it does (with Tartary) all Europe in extent. Indeed the publicity unreservedly given to political and state matters of every description, is a singular feature in their system. The Peking Gazette has very correctly been de-

scribed as a state engine of no inconsiderable importance, exhibiting obvious proofs of an anxiety to influence and conciliate public opinion upon all public questions, in a manner which could not be predicated of a government theoretically despotic.

Some account of their great work on criminal law has already been given in the sixth chapter. The civil code of the present Tartar dynasty is called Ta-tsing Hocy-tien, and consists of no less than two hundred and sixty-one volumes, of which it may be worth while to abstract some particulars, from the appendix to one of the annual reports (1829) of the Anglo-Chinese college. It contains not only the existing laws, but an account of all the changes and modifications of the law by successive emperors since the conquest in 1644, and frequently the *reasons* assigned at the time for the enactment of new, or repealing of old laws. The whole is preceded by prints explanatory of all state ceremonies, both civil and religious. Then follow maps of every principal district in the empire, including not only China Proper, but Eastern and Western Tartary.

The body of the work is divided into nine parts, of which the first contains all regulations concerning the imperial house now reigning, with the privileges of the descendants of the Tartar conqueror, in the direct and collateral lines. The second part relates to the palace and its regulations. The next six parts are concerning the Six Tribunals, or Boards, among which the whole details of the government are distributed in order, as before noticed. Under the ninth and last division are miscellaneous laws relating to public education, the examination of candidates for public honours and offices, peculiar laws concerning the Tartar dependencies, with the courts which take cognisance of their affairs.

In that part which relates to the first of the six executive boards (that of civil offices) is a detailed list of all the appointments in the empire, the rel-

ative rank of each officer, and the rules for selecting, appointing, removing, rewarding, and punishing. In the management of official people the principle of a comparison of merits and demerits is kept in view, and the one are set off against the other. A graduated record of both is preserved, and an officer is accordingly promoted or degraded so many steps. Some approach to this system has lately been made in our own Indian empire, where it appears that a regular report is sent to the government of even the private conduct and demeanour of every civil *mandarin*, by his immediate superior. In China, there is a terrible round of espionage in perpetual operation, and *mutual jealousy* substituted for the principle of *honour*. This may be very necessary and proper as relates to the Chinese, but we can hardly suppose it called for in our Indian empire, near as that may be to China. At Peking, members of the imperial house are all required to attend the public boards and listen to what is going on. In case of observing any thing amiss, they are permitted to give information to the emperor. When our last ambassador was in the neighbourhood of Peking, such persons were looking on continually as spies, and one of the conductors of the embassy, by way of caution to the strangers, told them that the emperor had very *long ears;* an asinine attribute which no one had the presumption to contest.

Under the head of science, we shall soon have more particularly to consider that portion of Chinese learning which relates to astronomy, geography, and medicine. The two former departments have been infinitely indebted to the Roman Catholic missionaries, and to the patronage which those scientific and learned persons received from Kang-hy, the most liberal and enlightened of Chinese monarchs, who condescended even to take lessons in mathematics from the Jesuits. In the department of medicine (surgery they do not attempt) we shall see that

the Chinese works contain their whole knowledge of natural history, with their peculiar theory of the circulation and the materia medica of the animal, vegetable, and mineral kingdoms, as contained in that voluminous work, the Pun-tsaou. Considering the little intercourse that the Chinese have had with other countries, it is perhaps quite as surprising that they should know no more; for everything they possess, with the exception of the two departments of astronomy and geography, may be considered as *their own*.

Reserving the lighter literature of China, (its *belles lettres*,) as poetry, drama, and romance, for a separate chapter, we may observe that specimens of more serious works have, in the course of rather more than a century, been but scantily presented, in various European translations, to the knowledge of the western world. It was as early as 1711 that Père Noel's Latin version of the *Four Books*, with two other subordinate classics, was printed; at a long interval after that date, appeared Gaubil's translation of the *Shoo-king*; and in 1785 was published Mailla's voluminous work, in fourteen quartos, entitled "Histoire générale de la Chine," being a version of the native annals, called *Tsung-kien-kang-mo*. Fresh translations of several portions of the "Four Books" have since been made; among the rest, Mencius, by M. Stanislas Julien; while a complete English version of the whole issued from the Anglo-Chinese press in 1828. A French translation of the ancient ritual, and ceremonial code of China, is said to be at present in preparation by M. Julien.

Of some of the missionary translations, especially those of our own country, it may be observed, that if there is much that is obscure or worthless in the original works, this has been rendered still worse by the wretched attempt to render word for word, thus exhibiting the whole in a jargon which has not inaptly been distinguished as "missionary English." This of course must be anything but a *faithful* pic

ture of the originals, which, with all their defects in point of matter, are well known to be, in respect to manner and style, the models of the language in which they were composed. It is to this foolish and injudicious system of translation that we must attribute the following harsh judgment on that particular department of Chinese letters which appeared some years ago in a critical work. "The specimens which have reached us through the medium of the missionaries are not the best adapted to convey information respecting the present state of the Chinese. Their labours are sufficiently voluminous, but their choice of subjects is not always the most happy. We may find an apology for the Chinese in endeavouring to make sense of their ancient records; but we cannot conceive what interest a few insulated Europeans can possibly take in toiling to unravel the inextricable confusion of their *king*, or canonical books." The fact is, that the confusion of the originals has occasionally, by means of uncouth translation, been made "confusion worse confounded."

CHAPTER XVI.

LITERATURE (*continued.*)

Belles Lettres—The Drama—Passion for Theatrical Exhibitions—Neglect of the Unities—Character of Plays—Comparison with Greek Drama—Plot of a Play—Division into Acts—Analysis of a Tragedy—Poetry—Structure of Verse—Character of Poetry—An Ancient Ode—Poem on London—Romances and Novels—Outline of a Chinese Romance.

"THE Chinese stand eminently distinguished," says a writer in the Quarterly Review,* "from other

* Vol. xli., p. 85.

Asiatic nations, by their early possession and extensive use of the art of *printing*—of printing, too, in that particular shape, the stereotype, which is best calculated, by multiplying the copies and cheapening the price, to promote the circulation of every species of their literature. Hence they are, as might be expected, a reading people; a certain quantity of education is universal among even the lower classes—and, among the higher, it is superfluous to insist on the great estimation in which letters must be held under a system where learning forms the very threshold of the gate that conducts to fame, honours, and civil employment. Amid the vast mass of printed books, which is the natural offspring of such a state of things, we make no scruple to avow that the circle of their *belles lettres*, comprised under the three heads of drama, poetry, and romances or novels, has always possessed the highest place in our esteem; and we must say that there appears no readier or more agreeable mode of becoming intimately acquainted with a people, from whom Europe can have so little to learn on the score of either moral or physical science, than by drawing largely on the inexhaustible stores of their ornamental literature." We may therefore proceed to consider Chinese *belles lettres*, in the threefold division of drama, poetry, and prose fiction.

In a moderate collection of Chinese books belonging to the East India Company, there are no less than two hundred volumes of plays, and a single work in forty volumes contains just one hundred theatrical pieces. The government of the country, though it does not (like that of imperial Rome) provide spectacles for the people at its own cost, gives sufficient countenance and encouragement to such amusements, by permitting them to be erected in every street by subscriptions among the inhabitants. On some particular days the manda

rins themselves supply the funds. The principal public occasions of these performances are certain annual festivals of a *religious* nature, when temporary theatres, constructed with surprising facility of bamboos and mats, are erected in front of their temples, or in open spaces through their towns, the spectacle being continued for several days together. The players in general come literally under our legal definition of *vagabonds*, as they consist of strolling bands of ten or a dozen, whose merit and rank in their profession, and consequently their pay, differ widely according to circumstances. The best are those who come from Nanking, and who sometimes receive very considerable sums for performing at the entertainments given by rich persons to their friends.*

To prove the rage of the Chinese for their theatrical exhibitions, we insert an account of the expenses annually incurred at Macao, which is partly a Portuguese town and contains few rich Chinese, on account of play acting.† In front of the large temple, near the barrier wall that confines the Portuguese, twenty-two plays are performed, the acting of which alone amounts, without including the expenses of erecting the theatre, to 2,200 Spanish dollars. At the Chinese temple, near the entrance of the inner harbour, there are annual performances, for which 2,000 dollars are paid; and various lesser

* The female parts are never performed by women, but generally by boys. "No women ever appeared on the Greek and the Roman theatres; but the characters in the dramas of the latter, as (occasionally) in those of China, were sometimes played by eunuchs. The soft and delicate female characters of Shakspeare had not the advantage of being played by a female during his life; Mrs. Betterton, about 1660, being the first, or nearly the first, female who played Juliet and Ophelia."—*Brief View of the Chinese Drama*, p. xiv.

† Chinese Gleaner, 1821, p. 60.

exhibitions through the year make up the total expenditure under this head to upward of 6,000 dollars, or 1,500*l.*, among a small population of mere shopkeepers and artisans. A circumstance, however, occurred at Macao in 1833, which must have impressed the Chinese with the notion that Europeans were fully as much devoted to such amusements as themselves. A party of Italian opera singers from Naples, consisting of two *signoras* and five *signors*, after having exercised their vocation with success in South America, proceeded on their way across the Pacific westward towards Calcutta, as to a likely and profitable field. Circumstances having occasioned their touching at Macao, they met there with inducements to remain some six months, until the season should admit of their prosecuting the voyage; and a temporary theatre having been contrived, they performed most of Rossini's operas with great success. The Chinese were surprised to find what, in the jargon of Canton, is called a *Sing-song*, erected by the foreigners on the shores of the celestial empire, and in that very shape, too, which most nearly resembles their own performances, a mixture of song and recitative. As the nearest way home from Calcutta, for these Italians, was by the Cape of Good Hope, they were a singular instance of the opera performing a voyage round the world.

Before touching on the subject of their dramatic compositions, we will say a word regarding the mere scenic exhibitions of the Chinese, which may at any time be viewed by strangers who visit the country, and of which even persons ignorant of the language can form a sufficient judgment. "They have no scenical deception," observes the editor of the *Heir in Old Age*, "to assist the story, as in the modern theatres of Europe; and the odd expedients to which they are sometimes driven by the want of

scenery, are not many degrees above Nick Bottom's 'bush of thorns and a lantern, to disfigure or to present the person of Moonshine'—or the man 'with some plaster, or some loam, or some rough-cast about him, to signify wall.'" Thus, a general is ordered upon an expedition to a distant province; he brandishes a whip, or takes in his hand the reins of a bridle, and striding three or four times round the stage in the midst of a tremendous crash of gongs, drums, and trumpets, he stops short, and tells the audience where he has arrived. A tolerable judgment may be formed of what little assistance the imaginations of an *English* audience formerly derived from scenical deception, by the state of the drama and the stage as described by Sir Philip Sidney about the year 1583. "Now you shall have three ladies walk to gather flowers, and then we must believe the stage to be a garden. By and by we have news of shipwreck in the same place; then we are to blame if we accept it not for a rock. Upon the back of that comes out a hideous monster with fire and smoke; and then the miserable beholders are bound to take it for a cave; while in the mean time two armies fly in, represented with four swords and bucklers, and then what hard heart will not receive it for a pitched field."

It is very true (as observed in the journal before quoted) that "the Chinese in their theatres leave more to the imagination than we do. They neither contrive that the action should all proceed on one spot, as in most specimens of the Greek tragedy, nor do they make use of shifting scenes. 'You can never bring in a wall,' says Snug the Joiner—so say the Chinese; and though their contrivances are not quite so outrageously absurd as those in the Midsummer Night's Dream, they are scarcely more artificial." The truth, however, on this subject seems to be, that though scenery and other adven-

titious aids of the kind no doubt tend to aid the illusion, they are by no means absolutely necessary to it; and in fact it is better to trust altogether to the imagination of the beholder, than to fall into those palpable errors which even Dennis successfully ridiculed in Addison's Cato, resulting as they did from a rigid adherence to the unity of place. The best scenic preparation that ever was devised must still call largely on the imagination for assistance; and the whole philosophy of the subject is summed up in the words of the chorus to Shakspeare's Henry V.

> "But pardon, gentles all,
> The flat unraised spirit that hath dared
> On this unworthy scaffold to bring forth
> So great an object. Can this cockpit hold
> The vasty field of France, or may we cram
> Within this wooden O, the very casques
> That did affright the air at Agincourt?
> Oh pardon, since a crooked figure may
> Attest, in little space, a million;
> And let us, cyphers to this great accompt,
> On your imaginary forces work:
> Suppose within the girdle of these walls
> Are now confined two mighty monarchies,
> Whose high upreared and abutting fronts
> The perilous narrow ocean parts asunder;
> Piece out our imperfections with your thoughts
> Into a thousand parts divide one man,
> And make imaginary puissance," &c.

It is very possible that the delicate taste of the Greeks, alive to this difficulty, chose rather to evade than encounter it, by that rule which confined the number of interlocutors, at one time on the stage, to three persons. But then mark the consequence; half the events of the drama must be *told* to the audience, and in lieu of the stirring and active scenes which keep attention alive, and prevent the performance from flagging, we have those intermi

nably long stories, which may be beautiful taken by themselves, and constitute a fine dramatic poem for the closet, but are quite unsuited to the stage. In one of the plays of Æschylus, the "Seven before Thebes," there is a spy, or messenger, who comes in and describes in a speech, of we forget how many pages, the details of the whole siege, with the arms and accoutrements of the besiegers!

The costume, at least, of the Chinese stage is sufficiently appropriate to the characters represented, and on most occasions extremely splendid. Their gay silks and embroidery are lavished on the dresses of the actors, and as most of the serious plays are historical, and for obvious reasons do not touch on events that have occurred since the Tartar conquest, the costumes represent the ancient dress of China, which in the case of females is nearly the same now as ever; but, as regards men, very different. The splendour of their theatrical wardrobe was remarked by Ysbrandt Ides, the Russian ambassador, as long ago as 1692. "First entered a very beautiful lady magnificently dressed in cloth of gold, adorned with jewels, and a crown on her head, singing her speech with a charming voice and agreeable motion of the body, playing with her hands, in one of which she held a fan. The prologue thus performed, the play followed, the story of which turned upon a Chinese emperor long since dead, who had behaved himself well towards his country, and in honour of whose memory the play was written. Sometimes he appeared in royal robes, with a flat ivory sceptre in his hand, and sometimes his officers showed themselves with ensigns, arms, and drums," &c.

As the Chinese make no regular distinction between tragedy and comedy in their stage pieces, he claims of these to either title must be determined by the subject and the dialogue. The line

is in general pretty strongly marked; in the former by the historical or mythological character of the personages, the grandeur and gravity of the subject, the tragical drift of the play, and the strict award of what is called poetical justice; in the latter, by the more ordinary or domestic grade of the *dramatis personæ*, the display of ludicrous characters and incidents, and the interweaving of jests into the dialogue. Some of their stage pieces are no doubt of a vulgar and indecent description; but these in general constitute the amusement of a particular class of society, and are generally adapted to the taste of those who call for them at private entertainments, as already noticed. A list of the plays, which the company of actors is prepared to represent, is handed to the principal guest, who makes his selection in the way most likely to be agreeable to the audience.

The early travellers, as Bell and others, who have given an account of the impressions which they received from the Chinese theatrical performances, were able to judge of little more than the mere spectacle before them, and being ignorant of the language, could give no account of the merits of the dramatic dialogue. The first specimen of a play was translated into French by the Jesuit Prèmare, who, although actually residing at Peking, and a most accomplished Chinese scholar, (as appears from his *Notitia Linguæ Sinicæ*,) did not give more than the prose parts, leaving out the lyrical portions, or those which are sung to music, because, as he observes, "they are full of allusions to things unfamiliar to us, and figures of speech very difficult for us to observe." Voltaire made Prèmare's translation of the *Orphan of Chaon* the groundwork of one of his best tragedies, *L'Orphelin de la Chine:* it is founded on an event which occurred about a hundred years before the birth of Confucius. A military leader having usurped the lands of the house

of Chaou, is determined on exterminating the whole race. A faithful dependant of the family saves the life of the orphan, and male heir, by concealing him and passing off his own child in his stead. The orphan is brought up in ignorance of his real condition, until he reaches man's estate, when the whole subject being revealed to him by his tutor and guardian, he revenges the fate of his family on the usurper, and recovers his rights. In this plot, Dr. Hurd remarked a near resemblance in many points to that of the Electra of Sophocles, where the young Orestes is reared by his *pædagogus*, or tutor, until he is old enough to enact summary justice on the murderers of his father Agamemnon.

It would be easy to point out a number of instances in which the management of the Chinese plays assimilates them very remarkably to that of the Greek drama; and they may both be considered as *originals*, while the theatres of most other nations are copies. The first person who enters generally introduces himself to the audience exactly in the same way, and states briefly the opening circumstances of the action. "These prologues," observes Schlegel, "make the beginnings of Euripides' plays very monotonous. It has a very awkward look for a person to come forward and say, 'I am so and so, this and that has been done, and what comes next is thus and thus.'" He compares it to the labels proceeding from the mouths of the figures in old paintings; and there certainly appears the less need for so inartificial a proceeding on the Greek stage, inasmuch as the business of the prologue, or introduction, might have been transferred to the chorus. The occasional, though not very frequent or outrageous, violation of the *unities* in the Chinese drama may easily be matched in most other languages, and examples of the same occur even in some of the thirty-three Greek tragedies that remain to us; for the unity of *action* is not observed in the Her-

cules furens of Euripides; nor that of *time* in the Agamemnon of Æschylus, Trachymans of Sophocles, and the Suppliants of Euripides; nor that of *place* in the Eumenides of Æschylus. The unimportance, however, of a rigid attention to these famous unities has long since been determined, and it is admitted that even Aristotle, to whom they have all been attributed, mentions only that of action at any length, merely hints at that of time, and of place says nothing whatever.

Prèmare's specimen of the Chinese stage was followed, at the distance of about a century, by the translation of the "Heir in Old Age," which is in fact a comedy from the same collection (the Hundred plays of Yuen) that had afforded the former sample. In this the translator supplied, for the first time, the lyrical or operatic portions which are sung to music, as well as the prose dialogue, having endeavoured, as he observes in the introduction, "to render *both* into English in such a manner as would best convey the spirit of the original, without departing far from its literal meaning." This was the more likely to be efficiently performed, as he was then resident in the country, and could avail himself of native references. The "Heir in Old Age" serves to illustrate some very important points connected with the Chinese character and customs. It shows the consequence which they attach to the due performance of the oblations at the tombs of departed ancestors, as well as to the leaving male representatives, who may continue them; and at the same time describes the ceremonies at the tombs very exactly in detail. The play serves, moreover, to display the true relation of the handmaid to the legitimate wife, and proves a point on which we have before had occasion to insist, that the former is merely a domestic slave, and that both herself and offspring belong to the *wife*, properly

so called, of which a man can legally have only one.*

To give a brief abstract of this play from the introductory memoir—the *dramatis personæ* are made up entirely of the members of a family in the middle class of life, consisting of a rich old man his wife, a handmaid, his nephew, his son-in-law, and his daughter. The old man, having no son to console him in his age, and to perform the obsequies at his tomb, had, like the Jewish patriarch, taken a handmaid, whose pregnancy is announced at the opening of the play, in which the old man commences with saying, "I am a man of Tung-ping-foo," &c. In order to obtain from Heaven a son instead of a daughter, he makes a sacrifice of sundry debts due to him, by burning the bonds, and this propitiatory holocaust serves, at the same time, to quiet some scruples of conscience as to the mode in which part of his money had been acquired. He then delivers over his affairs to his wife and his married daughter, dismissing his nephew (a deceased brother's son) with a hundred pieces of silver to seek his fortune, as he had been subjected at home to the persecution of the wife. This done, the old man sets out for his estate in the country, recommending the mother of his expected son to the humane treatment of the family, and with the hope of receiving

* In the penal code there are some express safeguards for the rights of a wife, and it is provided that any man degrading his legal wife to the situation of a handmaid shall be punished with one hundred blows; and that he who during the life of his legitimate spouse treats any handmaid on an equality with her, shall receive ninety blows, and both parties be restored to their proper stations. It is added, "He who having a *wife* marries *another* wife, shall be punished with ninety blows, and the second marriage shall be void." The notes on this law observe that "a wife is one whose person is equal in rank to that of her husband: a handmaid, one who is merely admitted to his presence."

from them speedy congratulations on the birth of a son.

The son-in-law now betrays to the daughter his disappointment at the expected birth, since, if it proves a girl, they shall lose half the family property, and if a son, the whole. His wife quiets him by a hint how easily the handmaid may be got rid of, and the old man persuaded that she had suddenly disappeared; and shortly afterward both the son-in-law and the audience are left to infer that she had actually contrived to make away with her. In the mean time the old man waits the result in great anxiety; his family appear in succession to console him for the loss of his hopes. In the bitterness of his disappointment he bursts into tears, and expresses his suspicions of foul play. He then attributes his misfortunes to his former thirst of gain, resolves to fast for seven days, and to bestow alms publicly at a neighbouring temple, in the hope that the objects of his charity may treat him as a father. Among the beggars at the temple, his nephew appears in the most hopeless state of poverty, being reduced to take up his lodging under the furnace of a pottery; he is insulted by the son-in-law, and reproached by the old man; but his uncle, moved with compassion, contrives to give him a little money, and earnestly advises him to be punctual in visiting the tombs of his family at the approaching spring, assuring him that a due attention to those sacred rites must ultimately lead to prosperity. It is on the importance attached to the sepulchral ceremonies that the whole drama is made to turn.

The nephew accordingly appears at the tombs, performs the oblations as well as his poverty will admit, and invokes the shades of his ancestors to grant him their protection. He no sooner departs than the old uncle appears with his wife, expressing their indignation that their own daughter

and son-in-law had neglected to come with the accustomed offerings. They observe from the appearances at the sepulchre that their nephew must have been there. The scene at the tombs, and the reflections of the old man thereon, have considerable interest; he reasons with his wife, and convinces her that the nephew is nearer in blood, and more worthy than the son-in-law: she relents, and expresses a wish to make him reparation; he appears, a reconciliation takes place, and he is received back into the family. The son-in-law and daughter now enter with a great bustle, and a procession, to perform the ceremonies, but are received with bitter reproaches for their tardy piety and ingratitude, and forbidden to enter the doors again.

On the old man's birthday, however, they desire permission to pay their respects, when, to the boundless surprise and joy of the father, his daughter presents him with the long-lost handmaid and child, both of whom, it appears, had been secreted by the daughter unknown to her jealous husband, who supposed they were otherwise disposed of. The daughter is taken back, and the old man divides his money in three equal shares between her, his nephew, and his newly-found son; the play concluding with expressions of joy and gratitude that the venerable hero of the piece had obtained "an heir in his old age." Such is the brief outline of the story, which arises entirely out of the misery resulting from the want of a male heir to perform the oblations of the tombs. The events follow each other in so natural and uninterrupted a manner, that the time employed in the course of the piece, which is three years, would not be perceived but for the age of the child brought forward in the concluding act. The play, including the proem or introductory portion, consists in reality of just *five* acts, and this peculiar division is common to the *hundred plays*

from which this and the other translated specimens have been taken.

These separate portions of the play, however, are not so distinctly marked on the Chinese stage as on ours, there being little need of preparation or change of scene, and the division seems to exist rather in the book than in the representation. The first, or introductory portion is called the "opening," and the remaining four are styled "breaks." All the directions to the actors are printed as in our stage books. "Ascend" and "descend" are used for *enter* and *exit*, and to speak *aside* is expressed by a term which means, to "say at the back" of any person. Thus in one of the hundred plays, an intriguing lover, who meets his mistress by appointment, exclaims on seeing her, as any other Lothario might do, "(*aside*) she has changed her habit of yesterday, and truly looks like a divinity." In the Chinese play books certain invariable words of names are adopted to mark the particular relations of the different *dramatis personæ*, as the first and secondary male and female characters, (the *prima donna*, &c.,) and these are used in every play indiscriminately, whether its complexion be tragic or comic. The musical portions, in accordance with the Chinese theory of poetry,* express the most passionate parts, and therefore belong only to the principal characters. In this respect there is no resemblance to the Greek theatre, where the *chorus*, as a distinct body, sang together, or in responsive parts called strophe and antistrophe; while certain spoken portions were delivered by their Coryphæus, or leader, who therefore speaks in the singular number.

In another specimen of the Chinese theatre, which is of a tragic cast, and turns on the misfortunes of one of the native emperors against the Mongol Tartars, the translator has followed the example of

* See page 62.

Prèmare, and having before (for the first time) given a drama in its whole details, including the lyrical portions, confined himself on this occasion chiefly to the spoken dialogue, and the principal course of the action. Love and war constitute the whole subject of the piece, of which the moral is to expose the evil consequences of luxury, effeminacy, and supineness in the sovereign. The story is taken from that portion of the Chinese annals previous to the first conquest by the Mongols, when the declining strength of the government imboldened the Tartars in their aggressions, and gave rise to the system of propitiating those barbarians by tribute, and by alliances with the daughters of China. The play opens with the entrance of the Tartar khan, who thus προλογίζει:—

"We have moved to the south, and approached the border, claiming an alliance with the imperial race. I yesterday despatched an envoy with tributary presents to demand a princess in marriage, but know not if the emperor will ratify the engagement with the customary oaths. The fineness of the season has drawn away our chiefs on a hunting excursion amid the sandy steppes. May they meet with success!—for we Tartars have no fields; our bows and arrows are our sole dependence." [*Exit.*]

Then appears the emperor's chief minister and favourite, who in a soliloquy makes known the system by which he governs his master, persuading him "to keep aloof from his wise counsellors, and seek all his pleasures among the women of his palace." To him enters the emperor, and after a consultation it is settled that the minister shall proceed diligently through the realm in search of the most beautiful ladies, and furnish his master with faithful portraits of them, as a means of fixing his choice. He abuses his commission, however, and makes it an occasion for extorting bribes from those who seek the benefit of the alliance. The most beautiful of all

is daughter to a cultivator of the land, who has not the means of satisfying the rapacity of the minister; and the latter, in order to be revenged, misleads the emperor by presenting him with a disfigured portrait of the fair one. Chance, however, throws her in the emperor's way, who is struck by her beauty, and the secret is now discovered, as he at once learns from her how he has been deceived by his favourite.

"Keeper of the yellow gate, bring us that picture that we may view it. (*Sees the picture.*) Ah! how has he dimmed the purity of the gem, bright as the waves in autumn. (*To the attendant.*) Transmit our pleasure to the officer of the guard to behead Maouyen-show, and report to us his execution."

The traitor, however, contrives to escape, and carries his head safely upon his shoulders to the Tartar camp, where he exhibits a true likeness of the lady to the barbarian king, and persuades him, with ingenious villany, to demand her of the emperor. An envoy is immediately despatched by the khan, who adds, "Should he refuse, I will presently invade the south: his hills and rivers shall be exposed to ravage." The unfortunate emperor's fondness continues to increase, and the arrival of the Tartar envoy fills him with perplexity and despair. He calls on his servants to rid him of these invaders, but they bewail the weakness of the empire, point out the necessity of the sacrifice, and call on his majesty to consult the peace and safety of his realms by complying with the khan's demand. He consents, after a struggle, to yield up the beauty, who is now a princess, but insists on accompanying her a portion of the way. The parting scene has considerable interest, and the language of the imperial lover is passionate to a degree that one is not prepared to expect. Then at length comes the catastrophe. The Tartar retires with his prize, until they reach the banks of the river Amoor or Saghalien, which falls into the sea of Ochotsk.

"*Princess.* What place is this?

"*Khan.* It is the river of the Black Dragon,* the frontier of the Tartar territories and those of China. This southern shore is the emperor's—on the northern side commences our Tartar dominion.

"*Princess*—(*to the khan.*) Great king, I take a cup of wine, and pour a libation towards the south—my last farewell to the emperor. (*Pours the libation.*) Sovereign of Han, this life is finished: I await thee in the next!" With these words she throws herself into the river and perishes; and here the tragedy might properly end. The khan in great sorrow decrees her a tomb on the river's bank, and, with more generosity than might have been expected from him, remits all further demands on the emperor; directing that the wicked cause of these misfortunes shall be delivered over to the Chinese, to receive the just reward of his misdeeds. But the piece continues through another act, in which the emperor's sorrows are either said or sung, until he is at length pacified by the death of the traitor.

Another specimen from the hundred plays has been translated in France by M. Stanislas Julien, now professor of Chinese at Paris. As in the previous instance of the "Heir in Old Age," he has given a version of the whole drama, including both the prose and the lyrical parts, and promises some further

* In this name the Chinese have translated the Tartar, *Saghalien oula*, "Black Water river," by Black Dragon river. The same fabulous monster is common to the mythological literature of ancient Europe and China, being always described and represented as a scaly serpent with claws, fraught with fire and smoke.

——πυρος
Δρακοντ' αναβλεποντα φοίνιαν φλογα.

The Chinese dragon is in reality a *hydra*, but with one head; and we may perceive, in the analogy between the *waving* track of the monster, and the *serpentine* course of rivers, a similar origin for the hydras of Greece and China.

samples of the same kind. The name of the piece which he has rendered into French is *Le Cercle de Craie*, "the chalk ring, or circle," founded on the principal incident in the piece, which is in fact so like *the Judgment of Solomon*, that it might lead one to believe the Chinese play had been borrowed from some obscure tradition, or report of it. Two women claim to be the mothers of the same child before a judge, who, in order to get at the truth, orders a chalk ring to be drawn on the floor of the court, and the contested child placed in the middle of it. He then declares that the child shall belong to whichever of the women may succeed against the other in pulling it out of the circle. The feigned mother, having no compunction for the infant, gets the better of the real one, who, from her maternal tenderness for the child, is afraid of exerting her whole strength; and the sagacious judge, "a second Daniel come to judgment," gives the cause in favour of the right claimant. With this last specimen we conclude our sketch of the Chinese theatre.

A very full and detailed notice of Chinese poetry has been printed in the Royal Asiatic Transactions,* with numerous examples, but we have not room in this place for more than an abstract of the subject. Some account of their earliest poetry has been already given in the twelfth chapter, where the "Book of Songs" was mentioned with the other ancient classics. In later times the structure of their verse has undergone considerable improvements, and there have been particular periods or eras of their history when the art of poetry has been especially cultivated. They compare its progress, themselves, to the growth of a tree—"the ancient Book of Odes may be likened to the roots; when *Soolo* flourished, the buds appeared; in the time of *Kien-gan* there was

* Vol. ii.

abundance of foliage; but during the *Tang* dynasty many reposed under the shade of the tree, and it yielded rich supplies of flowers and fruit." This Augustan age of Chinese poetry was in the eighth century of our era, or about 1,100 years ago, when the whole of Europe was involved in barbarism and ignorance.

It has generally been supposed that the Chinese words are entirely monosyllabic, (though this is not always strictly the case,) and hence it might be imagined that their versification could not be susceptible of much melody. This, however, would not necessarily follow, for Pope himself, one of the smoothest of our versifiers, has whole couplets consisting of mere monosyllables; for instance—

> "Ah, if she lend not arms as well as rules,
> What can she more than tell us we are fools?"

The truth, however, is, that the Chinese abounds with diphthongal, as well as dissyllabic* sounds, which contribute, when blended with others that are strictly monosyllabic, to give to its verse a certain share of varied euphony. In addition to this, it derives cadence and modulation from the use of certain tones or accents, which appear, however, originally to have owed their existence rather to the necessity of perspicuity in speech, than of melody in verse. Another source of harmony is the use of what may strictly be called *poetic numbers*. Every word of Chinese poetry corresponds to a metrical foot in other languages. The shortest consists sometimes of as few as *three*, repeated as a kind of chorus in songs; and this measure occasionally serves as a species of chiming verse for the inculcation of moral maxims. With the same view to assisting the memory, it has been adopted in the

* See page 144.

composition of the "Trimetrical Classic," a work which conveys to Chinese youth the rudiments of general knowledge.

The line of four words constitutes the chief part of the "Book of Odes" before mentioned. There, however, the measure of some pieces is altogether irregular, varying from three to seven or eight words in a line. Poetry in most countries begins with being the vehicle of religion and morality, and the first record of historical facts. Venerated at first as the language of wisdom or inspiration, it is at length cultivated as a pleasurable art, and never fails to improve in harmony, however it may degenerate in other points, with the progress of time. . . . . For the same reason that Pope is more harmonious than Chaucer or Donne, Boileau or Racine than Ronsard, Virgil or Tibullus than old Ennius, so the poetry of China from the eighth century down to the present time, is in point of mere versification a great improvement on the Book of Odes.* The improved system of versification consists in lines of five words, as well as in the longer measure of seven; but for examples of all these the reader must be referred to the treatise on Chinese poetry.

Besides a regular cæsural pause in a particular part of each verse, (which we cannot dilate upon here,) they have, in common with most other people, the use of *rhymes*, of which it may be principally observed that they occur at the termination of every second verse. The length of the stanza is determined by the recurrence of the same rhyme, and in a poem of any continuity it is generally of four lines only, that is, a quatrain, whose second and fourth lines rhyme together; but occasionally eight or more verses will have the same ending. In our own Spencerian stanza, the same rhyme occurs four times in the course of nine lines. The Chinese,

* On the poetry of the Chinese (*ut supra.*)

nowever, do not seem to possess a very nice ear for the perception of true rhymes ; and this inaccuracy may partly arise from their not having such precise symbols or marks of sound as our alphabetic letters.

"The next feature in the construction of Chinese verse," observes the treatise already referred to, "presents a striking coincidence with what has been remarked of the poetry of another Asiatic nation. In the preliminary dissertation on Hebrew poetry, prefixed to his translation of Isaiah, Bishop Lowth has treated at some length of a peculiar property which he calls *parallelism*, consisting of the correspondence of one verse with another, either in equivalency, or opposition of sense, or in the form of grammatical construction. The learned prelate adduces examples of these different sorts of parallelism from the Psalms ; as for instance—

> "The memory of the just is a blessing:
> But the name of the wicked shall rot"—
> "Dart forth thy lightnings and scatter them.
> Shoot out thine arrows and consume them."

There are perpetual examples in the Chinese, answering to the above description of the Hebrew; and the peculiar structure of that language generally renders the parallelism much more exact, and therefore much more striking, as it is usually word for word, the one written opposite to the other. The following is a translation of such parallelisms, taken from the "Heir in Old Age," but it can of course but imperfectly represent the original :—

> "Supinely gazing, now I vent my sighs,
> Now, bending down, in tears my sorrow flows;
> The wealthy alien claims connubial ties—
> The needy kinsman no relation knows."

To proceed from the structure of Chinese verse to the character of their poetry—this seems to con-

sist principally of odes and songs, of moral and didactic, and of sentimental and descriptive pieces; which different kinds, however, are so blended together, and run so much into one another, that it would not always be easy to separate them. One of the most ancient pieces in the Book of Odes, the date of which may perhaps reach to *three thousand* years, has reference to the success of a rich and powerful suitor, who carries off the bride that had already been engaged to an humbler rival. The allusion is to some robber bird, which, like the cuckoo, deprives weaker ones of their homes; and the translation of this antique specimen may serve to show the similarity that prevades the tone of human sentiment in the most distant ages and countries.

"The nest yon winged artist builds
The robber bird shall tear away:
—So yields her hopes th' affianced maid,
Some wealthy lord's reluctant prey.

"The fluttering bird prepares a home
In which the spoiler soon shall dwell
—Forth goes the weeping bride, constrained.
A hundred cars the triumph swell.

"Mourn for the tiny architect,
A stronger bird hath ta'en its nest;
—Mourn for the hapless, stolen bride,
How vain the pomp to sooth her breast!"*

The style of descriptive poetry among the Chinese may perhaps be best shown by the way in which they describe *ourselves*, for which purpose are selected the following stanzas from a poem on London, written as long ago as 1813, by a person better instructed than the generality of his countrymen who quit the celestial empire to travel abroad. This

* See Sir William Jones's version of another piece from the same collection, vol. i., p. 282

singular production has already excited some notice and been quoted in several publications from the treatise in the Royal Asiatic Transactions, where it was printed with the original text, and where the translator observed that the poem, being a simple description, contains few flights of fancy. As it would, therefore, have been a hopeless attempt, however well they may sound in Chinese, to give dignity in verse to matters so perfectly domestic and familiar to ourselves, it was judged best to afford a literal prose translation, but with all the extravagances and hyperboles of the original.

I.

"Afar in the ocean, towards the extremities of the northwest,
There is a nation, or country, called England:
The clime is frigid, and you are compelled to approach the fire
The houses are so lofty that you may pluck the stars.
The pious inhabitants respect the ceremonies of worship,
And the virtuous among them ever read the sacred books
They bear a peculiar enmity towards the French nation,
The weapons of war* rest not for a moment (between them.

II.

"Their fertile hills, adorned with the richest luxuriance,
Resemble, in the outline of their summits, the arched eyebrows (of a fair woman:)
The inhabitants are inspired with a respect for the female sex
Who in this land correspond with the perfect features of nature;
Their young maidens have cheeks resembling red blossoms,
And the complexion of their beauties is like the white gem
Of old has connubial affection been highly esteemed among them,
Husband and wife delighting in mutual harmony.

V.

"The two banks of the river lie to the north and south;
Three bridges† intercrupt the stream, and form a communication;

* Written in 1813.

† Old London, Blackfriars, and Westminster bridges were then the only three in existence.

Vessels of every kind pass between the arches,
While men and horses pace among the clouds (fogs?):
A thousand masses of stone rise one above the other,
And the river flows through nine channels:
The bridge of Loyâng, which out-tops all in our empire,
Is in shape and size somewhat like these. . . .

VII.

"The towering edifices rise story above story,
In all the stateliness of splendid mansions:
Railings of iron thickly stud the sides of every entrance,
And streams from the river circulate through the walls.
The sides of each apartment are variegated with devices;
Through the windows of glass appear the scarlet hangings:
And in the street itself is presented a beautiful scene;
The congregated buildings have all the aspect of a picture.

IX.

"The spacious streets are exceedingly smooth and level,
Each being crossed by others at intervals:
On either side perambulate men and women,
In the centre career along the carriages and horses:
The mingled sound of voices is heard in the shops at evening;
During winter the heaped-up snows adhere to the pathway:
Lamps are displayed at night along the street sides,
Whose radiance twinkles like the stars of the sky," &c.

It remains to take some notice of the Chinese works of fiction, in the shape of moral tales, novels, and romances, which, by the aid of the art of printing, so early invented, have become altogether innumerable. Among them, however, some have of course grown more famous and popular than others, and a very few are ranked under the title of *Tsae-tszc*, or "works of genius." Under the existing system of exclusion from the interior of the country, to which all Europeans are subject, they are perhaps the best sources to which we can address ourselves in order to obtain a knowledge of the everyday habits of the people. As the writers address themselves solely to their own countrymen, they need not be suspected of the spirit of misrepresentation, prejudice, and exaggeration, with which the Chinese are known to

speak of themselves to strangers. An odd instance of this kind once occurred at Canton. A native being told that the King of England was accustomed, on particular occasions, to be drawn in a carriage with *eight* horses, answered with the utmost readiness, "China emperor *twenty-four !*"

Many of the Chinese novels and romances which were written in the fifteenth century of our era, and some much earlier than that date, would contrast very advantageously, either as literary compositions or as pictures of society, with their cotemporaries of Europe. The Chinese at that period were long past the stage of civilization which gives birth only to apologues or extravagant fictions, and could relish representations of actual life, and of the complicated situations into which men are thrown by the contests of interest and of passion in an artificial state of things. Their novels and romances paint Chinese society as it really exists, and if they are on this account less amusing for children, they may be more interesting to such grown persons as have the curiosity to contemplate a state of civilization which has grown up of itself, and owes none of its features to an intercourse with Europe, or with the rest of the world.

Under the existing circumstances, we repeat, of our exclusion from the interior of the country, these works have a peculiar value, as they supply the information regarding manners, customs, and sentiment, which might otherwise be obtained from the observation of travellers, but can at present be gained only from books. Late changes in the trade have excited the jealousy, and raised the vigilance of the government to a degree which may render the access to any spot, except Canton, more difficult than ever; and the barrier seems to be one which nothing but a change in the present Tartar dynasty, or a successful appeal to arms, can remove. Under these circumstances, we must acquire our knowledge of

the country from native works; and the minuteness which characterizes their pictures of social life is particularly calculated to make us familiar with its most intimate recesses. M. Rémusat observes of them, "C'est dans la peinture des détails qu'excellent les romanciers Chinois, et c'est encore en cela qu'on peut les rapprocher de Richardson, de Fielding, ou tout au moins du Docteur Smollett, et de Mademoiselle Burney. C'est par là que les uns et les autres sont intéressants, vrais, habiles à faire ressortir les traits des passions, à dessiner les caractères, à produire un haut degré d'illusion. Leurs personnages ont, comme on dirat à présent, toute la réalité possible. On a veritablement fait connaissance avec eux quand on les a vu agir ou entendu parler, quand on les a suivis dans les particularités minutieuses de leur conversation."*

The "Fortunate Union" may be considered as a favourable specimen of these native pictures of life and manners. To quote the preface, "the interest and bustle of the scene, the spirit of the dialogue, the strong delineation and strict keeping of all the characters, joined to the generally excellent moral that is conveyed throughout, may serve to impress us with no unfavourable sentiments in regard to Chinese taste. The story commences with an act of generous devotion on the part of the hero, and the gratitude of the person whom he obliges becomes the ultimate occasion of his own triumph over the combinations of his enemies. The profligate, the malicious, and the base, when they have exhausted all the resources of ingenuity, meet with their just reward; while rectitude, prudence, and courage carry their possessors not only unharmed, but glorious through every trial.

"In the hero and heroine are accurately described the principles of the Confucian sect of philosophy, a

* Preface to *Les Deux Cousines*

sect which, in its professed admiration of virtue, and in its high tone of self-sufficiency and pride, assimilates somewhat to the ancient stoics. As we often find in our own favourite fictions, a number of the names have a reference to the characters of those who bear them. Thus the hero is named from *iron;* (quasi Ironside;) the heroine is *ping-sin*, icy-hearted —a term, however, which in her country means chaste, and not what we should call cold-hearted. There are many remarkable points of resemblance between the *Fortunate Union* and our own novels and romances at the present day. Every chapter is headed by a few verses bearing some relation to its contents, and appropriate lines are occasionally introduced as embellishments to the story. Except in some highly sustained dialogues, the prose parts convey the tone of ordinary conversation or narrative."

As the above work is rather celebrated among the Chinese themselves, and may serve as a sample of the particular department of literature to which it belongs, such readers as have not seen the English translation may like to be furnished with an outline, as it has already been epitomized in a popular periodical.* The hero of the Fortunate Union is a young student named Teihchungyu, whose family residence is at one of the chief cities of the province in which Peking is situated, but about two hundred and fifty miles from the capital. He is beautiful in person, but with a disposition naturally harsh and inflexible, and an irritable temper, which is however set off by some generous qualities, and a ready desire to succour persons in distress. His father belongs to that privileged class of *censors*, by which the constitution of the Chinese government is so singularly distinguished, and he is marked by the

* Asiatic Journal, vol. xxviii., p. 545.

boldness and uprightness of his advice to his sovereign. The son, on account of his hasty temper, is not taken to his father's official residence at Peking, but left at the family house in the province. At sixteen his parents had thought of choosing him a wife, but this was postponed at his own desire, and he continues his studies in solitude until the age of twenty, when, as he is one day reading at home, he comes upon the history of a minister famed in Chinese annals, who fell a victim to the honesty with which he reproved his sovereign.

Reflecting on this incident, it occurs to him that similar fidelity might expose his father to a similar fate; his anxiety leads him to determine on proceeding to Peking. On his way thither, he puts up for the night at a village, where he hears the story of a young student who, through the violence of a powerful noble, had lost the bride to whom he had been contracted in marriage. His enemy had seized the unfortunate lady, and shut her up in a retired palace, conferred on him by the emperor for very different purposes. Falling in, soon after, with the student himself, the youth inquires the particulars of his case, and promises to have his memorial presented to the emperor. On reaching Peking, our hero found his apprehensions realized regarding his father, who had given umbrage to the emperor, and been thrown into prison for the zeal with which he exerted himself in this very case of the young student. The matter had been referred to the criminal board; but the guilty noble contrived, by his wealth and influence, to remove every species of evidence; and then persuading the emperor that the censor had been deceiving him, he procured the degradation and imprisonment of the latter.

The hero proceeds at once to his father's place of confinement, and surprises him by producing the young student's memorial, which of itself is sufficient to exculpate the censor. They send a joint

representation to the emperor, praying for a secret warrant to apprehend all the parties concerned. This is obtained, and the youth, taking a brazen mace in his hand, sallies forth quietly and contrives to make his way into the secluded palace of the guilty noble. He there finds all the objects of his search; the ravisher, who at first makes a bold resistance, is roughly handled, and the lady set at liberty. The censor is restored to his former rank and dignities, and even promoted by the emperor, who punishes the convicted noble, and highly lauds the courage and zeal of the youth by whom this had all been brought about. The fame of Teihchungyu exposes him to so much notice at Peking that his father, dreading the effects of flattery and envy, advises his leaving the capital and proceeding on "a tour of instruction," which in China often forms a part of education, but is of course confined to the limits of their own vast empire.

In a district of the adjoining province of Shantung, is the family residence of a member of the military tribunal at Peking, who has no son, but a daughter named Shueypingsin, of exquisite beauty, with mental endowments equal to her personal charms. To her, his wife being dead, is intrusted the charge of his household and estate, while compelled by his office to reside at the capital. A worthless brother of this mandarin, named Shueyun, who has three sons and an ugly daughter, casts a longing eye on his large estate; the management of which, in default of male heirs to his brother, would come to himself on the marriage of Shueypingsin, his niece. His great object, therefore, is to bring this about, and (encouraged by the banishment of his brother for some official error into Tartary) he colleagues with a young profligate of rank, but of notorious bad character, who is determined to obtain the reluctant young lady in marriage, having seen her by stealth with the connivance of the uncle. She pretends to comply; but,

by a series of dexterous contrivances, in which she avails herself of the various forms and preliminaries of Chinese courtship, causes her designing but stupid uncle to impose upon the young rake his *own* ugly daughter. The rage of the disappointed suitor is great on detecting this trick, when it seems too late to be remedied; but the uncle, with characteristic baseness, suggests a scheme to pacify him, whereby the lonely and defenceless Shueypingsin may be still entrapped into the possession of her lover, claimed as his wife, and the real wife (his own daughter) reduced to the condition of a handmaid! This scheme is so plausibly contrived, that the young lady narrowly escapes "falling into the dragon's jaws." The interest is here highly dramatic; the good sense and presence of mind of the heroine coming to her aid in the very crisis of her fate. The failure of their plot fills the uncle and suitor with rage and shame, but all hands are compelled to admire the ingenuity and understanding of Shueypingsin.

Another scheme is then devised by the indefatigable and abandoned suitor, to seize the heroine by force, while returning from a filial visit to her mother's tomb, where she proceeds, according to custom, to perform the rites at the autumnal season. The young lady's suspicions are excited in time; she says nothing, but, changing her dress, steps into the chair of a female attendant, having before secretly placed a bundle of stones in her own sedan, and shut it up. This is waylaid on the return, and forcibly carried off by the lover and his attendants; while Shueypingsin proceeds quietly and safely towards her home. The empty chair is opened amid shouts of laughter from the neighbours and acquaintance of the libertine, who have thus been assembled only to witness his disgrace and disappointment. They counsel him to give up the pursuit of a person whose actions seem

to prove that she is something more than human; but his rage and ardour are only inflamed by these unexpected crosses; and he at length falls upon a third scheme.

He had resolved to seize her by force, but as she now kept her doors barred against strangers, fraud was necessary to obtain admission. A forged document is accordingly produced at her gate, purporting to be an account of her father's recall from exile. This gains entrance for the partisans and domestics of her abandoned admirer, by a numerous party of whom she is instantly surrounded. She desires to be conveyed to the magistrate, at the same time concealing in her sleeve a small dagger which may still avail her at her utmost need. As the magistrate is the friend and ally of the suitor, they readily comply with her desire, and hurry the young lady off in her chair "like a flight of crows or swallows on the wing."

The hero, Teihchungyu, whom we left on the point of proceeding on his travels, has just entered the town, and is riding leisurely along, when, in turning a corner, he meets the cortège, and comes violently in contact with the chair that contains Shueypingsin. Being nearly thrown by the shock, he seizes with characteristic energy upon one of the party; but, having received a suitable explanation, he is about to loose his hold when a plaintive female voice from within the chair exclaims, "I am suffering violent wrong, and rely on your bravery for succour." As any other knighterrant might do, he takes the whole party prisoners, and brings them to the tribunal of the magistrate, who is sitting ready prepared to give judgment in favour of his profligate friend. Our hero strikes on the great drum at the gate, and boldly entering the court addresses the judge on terms of equality. The latter, however, is not deterred from awarding Shueypingsin to her suitor; which so rouses the indignation

of Teihchungyu, that he interferes in a manner which intimidates the compliant magistrate. He becomes acquainted with the rank and condition of the hero, and is obliged to return Shueypingsin in safety to her own home.

Teihchungyu, in the mean while, becomes *éperdu* by the extraordinary beauty of the young lady whom he had thus rescued, exposed as she is to his gaze in the court of the judge; and her gratitude, for the service rendered her, is at least equal to his admiration. The discomfited suitor in revenge now engages some villanous priests at the Budhist monastery, where our hero had put up according to Chinese custom, to poison him in his food! Shueypingsin, who well knew the characters with whom he had to deal, employs emissaries to keep her regularly informed of what is going on. These acquaint her with the youth's illness; she guesses the whole truth, and, as the only means of saving his life, adopts the bold measure of removing him to her own house, to which he assents, though reluctantly, on account of the slander to which it may expose Shueypingsin. Arrived there, he is soon restored to health; though without ever seeing his hostess, and with the observance of the most rigid forms of Chinese decorum.

The enemy, on finding that their intended victim has escaped, endeavour to foil and perplex the heroine by sending her uncle to remonstrate with her on the irregularity of admitting the youth into the house. She, however, justifies her conduct by the urgency of the case, by the gratitude she owes Teihchungyu, and by telling her uncle that he would better show his solicitude for her by prosecuting the wretches from whose hands she had lately been rescued. After an ineffectual attempt to get up an accusation against the young people, by introducing a spy into the lady's house, whose evidence only places her conduct in a fairer light, they are obliged

to give up the case as desperate. The hero, on his recovery, of course takes his departure with increased feelings of regard to his hostess, and after meeting with some other adventures which are calculated to put his address or courage to the test, he proceeds home with the determination to prepare himself for the next public examination of literary graduates.

Shueypingsin's indefatigable suitor meanwhile makes one more attempt to get possession of the young lady, by engaging the services of a newly arrived imperial commissioner, a friend and protégé of his father at court. From this corrupt officer a warrant or license is obtained to espouse the maiden at her own house, according to a form which in particular cases is sanctioned by Chinese law. Shueypingsin is now driven to prepare a secret memorial to the emperor himself, which she first despatches to Peking by a private emissary, and then appeals publicly to the commissioner, on whose refusal to aid her, she exhibits the memorial which she had already sent up against him, and fills him with consternation. On his countermanding the nuptials, she is induced to send off a despatch for the recall of her messenger. Teihchungyu now learns what is going on during his absence, and, with the view of protecting his mistress, hurries off to Shantung province, which he reaches in a few days. On his first arrival he is seen by the profligate uncle, who soon makes his friend the suitor acquainted with the event. They try to entrap him, by sending a cunning boy with a pretended message from Shueypingsin, appointing an assignation at the back gate of her house. The inconsistency of this message with the lady's character opens his eyes to the fraud, and, seizing the boy, he forces him by threats to confess it is a trick of his enemies.

The next step is to devise another plot against our hero, whose abandoned rival calls at his lodg-

ings, and on being denied, leaves a ceremonial ticket. This compels Teihchungyu to return the call, for which his enemy is prepared with an entertainment, to which the youth is, much against his will, detained. It is concerted that a number of rakish fellows should join the party one by one, and get up a quarrel, in which, with their assistance, the host may revenge himself by maltreating Teihchungyu. His coolness, courage, and strength, however, avail him as usual, and when a fray becomes inevitable he completely discomfits the drunken party, and leaves them vowing loud vengeance. The description of this Chinese entertainment, and of the growing row, is highly characteristic, and proves that the most ceremonious of people can sometimes be the most unceremonious. The defeated party lodge a false charge against the hero, but the result redounds to their entire shame and disgrace.

Circumstances subsequently enable Teihchungyu to be of essential service to the exiled father of the heroine, and to procure at length his recall from banishment and reinstatement in his former honours. The families of the youth and maiden being thus drawn together, a proposed alliance is the natural consequence. The ultra refinement, however, of the Confucian school imposes scruples on the parties, lest such a consummation should lead the world to misconstrue the disinterested nature of their former intercourse. These scruples being overcome, fresh plots are laid by their enemies to oppose their union; and as the affair, from the rank of the parties, at length comes before the emperor in person, an investigation is set on foot, which exposes the wickedness of the other faction, and leads o the marriage being sanctioned with high encomiums from the "Son of Heaven" himself. All parties are punished or rewarded according to their deserts, and thus the Fortunate Union is concluded.

The interest of the story is sustained throughout by the Chinese author, with more skill and effect than in most native productions; and as a genuine picture of manners it is among the best suited to the use of those who desire, according to the expression of a French writer, "connâitre les Chinois par les Chinois mêmes."

CHAPTER XVII.

ARTS AND INVENTIONS.

Chinese origin of Printing.—Of Gunpowder.—Of the Compass.—Printed Books.—Manufacture of Paper.—Of Ink.—Composition of Gunpowder.—Mariner's Compass.—Variation of Needle.—Navigation.—Obstacles to Improvement.—Industrious Arts.—Metallurgy.—Metallic Mirrors.—Carving.—Silk Manufacture.—Management of Silkworms.—Porcelain Manufacture.—Egyptian Bottle.—Lackered Ware.—Fine Arts.—Painting.—Sculpture.—Music.

THERE appear to be reasonable grounds for the belief that what are justly considered in Europe as three of the most important inventions or discoveries of modern times, the art of printing, the composition of gunpowder, and the magnetic compass, had their first origin in China. However much we may have outstripped them in the use and application of these instruments or agents, the Chinese can urge claims to the priority of possession, which are sufficient to convince any unprejudiced person; and it seems fair to conclude that the knowledge or tradition of these contrivances travelled slowly westward through the channels of oriental commerce, and were obscurely derived, by those who first imported them to Europe, by the way of Asia Minor or the

Red Sea. There cannot be the least doubt of the art of printing having been practised in China during the tenth century of our era. The precise mode in which they operate is certainly different from ours; but the main principle, that of multiplying and cheapening books by saving the time and labour of transcription, is altogether the same.

Shortly previous to the commencement of the *Soong* dynasty, about the middle of the tenth century, a minister of state named Foong-taou is said to have introduced to the notice of government the art of taking impressions upon paper. History states that the first essay in printing was to transfer the pages from stone blocks on which the writing had been engraved, a process by which the ground of the paper was black, and the letters white. This at length led to the improved invention of wooden stereotype blocks, on which the characters were cut in relief, as at present, and the effect thereby *reversed*, the paper page remaining white, and the characters being impressed in ink. Dugald Stewart, in his work on the Philosophy of the Human Mind, considers the invention of printing "rather as the result of those general causes on which the progress of society seems to depend than as the mere effect of a fortunate accident;" in fact as a step in the social history of man, and as marking a particular point of his progress. Admitting this to be true, it would follow that the Chinese in the tenth century were not only further advanced than their contemporaries of Europe, (of which there can be no doubt whatever,) but that they had reached a higher point of civilization than the ancient Greeks and Romans.

The high estimation in which letters have ever been held in China may no doubt be supposed to have contributed to the invention by which books are rendered available to the greatest number of readers; and it seems evident, from Chinese history,

that as the period of Soong, which immediately followed, is celebrated for its writers, that invention gave an impetus to the national taste for its own peculiar learning. For all purposes of cheapness and expedition the method of printing is perfect; and a little consideration will show that the stereotype plan is more peculiarly suited to the Chinese characters than to any other. The European alphabet consists of only a few letters, whose infinite combinations form many languages: with them, on the contrary, every *word* is a different character. The six-and-twenty letters of our alphabet are all within the reach of the compositor in setting up a page of type; and, from long practice, he moves his hands to the little cells in which they are arranged almost without looking: but in China it would require the combination of a Briareus with an Argus to pick out the hundreds, if not thousands, of different characters in the printing of a single book. Then, again, the immense number of copies of their standard or sacred works required in a population of hundreds of millions, all *reading*, if they do not *speak*, the same language, is another reason for stereotype.

But, on the other hand, there are some rare occasions on which particular reasons exist to make single or moveable types preferable, and on these occasions the Chinese use them. Mention has already been made of the Red Book, or Court Calendar, containing the name and office of every functionary in the empire. A new edition of this is published every quarter, and as the characters which it contains are always pretty nearly the same, with only the difference of arrangement, this particular case approximates to that of our own alphabet; for which reason the Calendar and some other works are printed with moveable types. For their general literature, the stereotype possesses another advantage; they

can take off the impressions according to the sale of the work, and there is no needless expenditure of paper. When the faces of the letters are worn by use, they retouch them and render them available for further impressions; but, from the following account of their printing process, it will be remarked that there is not anything like the same pressure, nor consequently the same wear and tear, as in our European printing. This, however, may be compensated by the greater durability of material in our metal type.

The material commonly used by the Chinese is pear tree wood, called by them *lymo*. The wooden plate, or block, of a thickness calculated to give it sufficient strength, is finely planed and squared to the shape and dimensions of *two* pages. The surface is then rubbed over with a paste or size, occasionally made from boiled rice, which renders it quite smooth, and at the same time softens and otherwise prepares it for the reception of the characters. The future pages, which have been finely transcribed by a professional person on thin transparent paper, are delivered to the blockcutter, who, while the abovementioned application is still wet, unites them to the block, so that they adhere, but in an *inverted* position, the thinness of the paper displaying the writing perfectly through the back. The paper being subsequently rubbed off, a clear impression in ink of the inverted writing remains on the wood. The workman then, with his sharp graver, cuts away with extraordinary neatness and despatch all that portion of the wooden surface which is not covered by the nk, leaving the characters in pretty high relief. Any slight error may be corrected, as in our wood cuts, by inserting small pieces of wood: but the process is upon the whole so cheap and expeditious that it is generally easier to replane the block, and cut it again; for their mode of taking the

impression renders the thickness of the block an immaterial point.*

Strictly speaking, "the press of China" would be a misnomer, as no press whatever is used in their printing. The paper, which is almost as thin and bibulous or absorbent of ink, as what we call silver paper, receives the impression with a gentle contact, and a harder pressure would break through it. The printer holds in his right hand two brushes, at the opposite extremities of the same handle; with one he inks the face of the characters, and the paper being then laid on, he runs the dry brush over it so as to make it take the impression. They do this with such expedition that one man can take off a couple of thousand copies in a day. The paper, being so thin and transparent, is printed on *one side* only, and every printed sheet (consisting of two pages) is folded back, so as to bring the blank sides in inward contact. The fold is thus on the *outer* edge of the book, and the sheets are stitched together at the other: which might lead an uninformed person to take any Chinese book for a new work, with its leaves still uncut. In folding the sheets, the workman is guided by a black line, which directs him in the same manner that the holes made by the points in our printed sheets direct the binder.

Every Chinese volume is a species of *brochure*, neatly stitched with silk thread in a smooth paper of a drab colour, and every volume is numbered on the outer edge of the leaves. Collectors of choice books put up about ten volumes of the same work in a neat case, covered with flowered satin or silk. The popular works of the country are greatly cheaper than ours; they have no taxes on literature, and three or four volumes of any ordinary work, of

* For ephemeral works, this block printing is of course less adapted. A daily paper at Canton is imperfectly printed from a composition of the consistence of wax, in which characters can be more rapidly formed.

the octavo size and shape, may be had for a sum equivalent to two shillings. A Canton bookseller's manuscript catalogue marked the price of the Four Books of Confucius, including the Commentary, at a sum rather under half a crown. The cheapness of their common literature is occasioned partly by the mode of printing, but partly also by the low price of paper. What is called *India paper* by our engravers and printsellers is nothing but the large sheets in which the silk piece goods of China are wrapped, as they are brought to us from Canton. These have commonly been purchased at an exorbitant price in London; but they might be bought by the chest, upon the spot, for much less than our own paper costs. There is, however, a considerable duty on the importation.

The date of the invention of paper seems to prove that some of the most important arts, connected with the progress of civilization, are not extremely ancient in China. In the time of Confucius they wrote on the finely pared bark of the bamboo with a style; they next used silk and linen, which explains why the character *chy*, paper, is compounded of that for silk. It was not until A.D. 95, that paper was invented. The materials which they use in the manufacture are various. A coarse yellowish paper, used for wrapping parcels, is made from rice straw.* The better kinds are composed of the *liber* or inner bark of a species of *morus*, as well as of cotton, but principally of *bamboo;* and we may extract the description of the last from the Chinese Repository:† "The stalks are cut near the ground, and then sorted into parcels according to their age, and tied up in small bundles. The younger the bamboo, the better is the quality of the paper which is made from it. The bundles are thrown into a reservoir of mud

* They also obtain paper from the re-manufacture of what has been used, as well as from rags of silk and cotton.

† Vol. iii., p. 265.

and water, and buried in the ooze for about a fort night to soften them. They are then taken out, cut into pieces of a proper length, and put into mortars with a little water, to be pounded to a pulp with large wooden pestles. This semi-fluid mass, after being cleansed of the coarsest parts, is transferred to a great tub of water, and additions of the substance are made until the whole becomes of sufficient consistence to form paper. Then a workman takes up a sheet with a mould or frame of the proper dimensions, which is constructed of bamboo in small strips, made smooth and round like wire. The pulp is continually agitated by other hands, while one is taking up the sheets, which are then laid upon smooth tables to dry. According to others, the paper is dried by placing the newly made sheets upon a heated wall, and rubbing them with brushes until dry. This paper is unfit for writing on with liquid ink, and is of a yellowish colour. The Chinese size it by dipping the sheets in a solution of fish glue and alum, either during or after the first process of making it.* The sheets are usually three feet and a half in length, and two in breadth. The fine paper used for letters is polished after sizing by rubbing it with smooth stones."

What is commonly known in this country under the name of Indian ink is nothing more than what the Chinese manufacture for their own writing. The writing apparatus consists of a square of this ink; a little black slab of schistus or slate,† polished smooth, with a depression at one end to hold water; a small brush, or pencil of rabbit's hair, inserted into a reed handle; and a bundle of paper. These four articles, the ink, the slab on which it is rubbed, the writing

* Sized paper is not required in their printing, where the ink is of a thicker consistency.

† This is found in the mountains called *Leu-shan*, on the west side of the Poyang lake, where the last embassy saw quantities of these slabs manufactured for sale.

pencil, and the paper, are called (with that respect which the Chinese profess for letters) "the four precious implements." They are taught very early to keep them in high order and neatness, and as men are always more or less the creatures of habit, this of course has its effect in the long run.

The Chinese, or, as it is miscalled, *Indian*, ink has been erroneously supposed to consist of the secretion of a species of *sepia*, or cuttlefish. It is, however, all manufactured from lampblack and gluten, with the addition of a little musk to give it a more agreeable odour.* Père Contancin gave the following as a process for making the ink: A number of lighted wicks are put into a vessel full of oil. Over this is hung a dome or funnel-shaped cover of iron, at such a distance as to receive the smoke. Being well coated with lampblack, this is brushed off and collected upon paper. It is then well mixed in a mortar with a solution of gum or gluten, and when reduced to the consistence of paste, it is put into little moulds, where it receives those shapes and impressions with which it comes to this country. It is occasionally manufactured in a great variety of forms and sizes, and stamped with ornamental devices, either plain, or in gold and various colours.

Besides being the universal ink of China, this manufacture serves occasionally with them, as it does with us, for drawings and designs, in executing which they use the same hair pencils with which they write. They consider that the best ink is produced from the burning of particular oils, but the commoner and cheaper kinds are obtained, it is said, from fir wood. As almost every place in China is more noted than others for the manufacture or production of some particular article, the best ink is produced at Hoey-chow-foo, not far from Nanking;

* A black die is obtained from the cup of the acorn, which abounds in gallic acid

and a certain quantity annually manufactured for the use of the emperor and the court, is called *Koong-me*, "tribute ink." The same name, however, is often given to any commodity, to imply its superiority over others of the same description, just as if the person who makes it were to call himself "Manufacturer to His Majesty." The best ink is that which is most intensely black, and most free from grittiness. Of the superior sorts, a number of ornamented cakes are often tastefully disposed in small cases finely japanned and gilt; and, when their ink is very old, the Chinese sometimes apply it, as they do almost everything in its turn, in *medicine*.

However ancient may be the discovery, among this people, of the *composition* of gunpowder, its particular application to firearms was probably derived from the west.* The silence regarding cannon of the two elder Polos,† who served at the siege of Siang-yang-foo about the year 1273, and the circumstance of those persons having taught the use of balistæ for hurling stones to the Tartar emperor, seem to prove that the Chinese at that period were as little acquainted with firearms as Europeans. Their history notices the use of a composition of the nature of Greek fire, which, when thrown into the ditches that surrounded cities, exploded in contact with water, and proved very destructive. The invention of powder, as compounded of "sulphur, saltpetre, and *willow* charcoal," is carried very far back by the Chinese, and was probably applied by them to fireworks, (in which they excel at present,) or other harmless and useful purposes, long before their unwarlike spirit could have suggested the use of guns to themselves, or they could have borrowed the notion from Europeans.

* The Chinese name has no reference to guns, and simply means *fire-drug*

† Marsden's edition, 4to., page 488.

It is reasonable to suppose that the early discovery of the composition of gunpowder was promoted by the abundance of *nitre*, a substance which abounds in the alluvial plains near Peking as much as it does in those of Bengal. Mr. Wilkinson of London, in a lecture on the subject of gunpowder, has some observations deserving notice. He gives a table of the different quantities of nitre, charcoal, and sulphur used by different nations in the manufacture, the proportions being expressed in 100 parts:—

	Nitre.	Charcoal.	Sulphur.	Total
England,	75	15	10	100
France,	75	15.5	9.5	100
Sweden,	75	16	9	100
Russia,	70	18.5	11.5	100
Austria,	76	13	11	100
China,	75.7	14.4	9.9	100

"The powder manufactured in England (Mr. Wilkinson observes) is preferred in commerce to that of other countries of Europe, as being much the strongest. It may therefore be inferred that our proportions are the best; though no doubt the excellence of the powder may partly depend upon the purification and perfect admixture of the materials. It is, however, worth observation, how nearly our proportions agree with those of the Chinese,* and, as they seldom change anything, it has probably been the same from the beginning; though, from the imperfection of the mixture and the impurity of the materials, their powder may be inferior in strength to that produced in many other countries." That it is sometimes tolerably efficient was proved by the author

* "The Honourable Colonel Napier, when in the ordnance department, procured a sample of powder from China, which on the average analysis of 2 oz. was found to consist of 720 gr. saltpetre, 141 charcoal, 89 sulphur, and 10 loss. Dividing the deficiency equally, and reducing it to the proportion in 100 parts, gives the result in the above table."—*Lecture.*

of this seeing a seaman killed at his gun on board the *Imogene* frigate, by a shot which first came through the ship's side. It must be observed, however, that the ship was then within pistol shot of the battery.

The Chinese, we may remark, have always acknowledged their great inferiority in gunnery. Before the Jesuits taught them to cast cannon, there is reason to suppose that they used tubes of wrought iron bound together by hoops, some of which were seen by Bell of Antermony. The last emperor of the *Ming* dynasty, as we have before observed, invited the assistance of some guns and artillerymen from the Portuguese of Macao against the Tartars and *Kang-hy*, after the conquest of China, employed Père Verbiest to superintend the casting of some hundreds of guns—a union of military pursuits with clerical, which brought some scandal upon the enterprising father at Rome. One circumstance in the Chinese system must tend very much to the imperfection of their gunpowder. This munition of war seems, from the following extract of a Peking Gazette for 1824, to be prepared by the troops themselves, as required: "The governor of Hoonan province has presented a report concerning the death of several persons by the explosion of gunpowder, as they were manufacturing the same in camp. While pounding the materials in a stone mortar, in the camp of the left division of the governor's troops, a spark which was struck ignited the whole quantity of powder, and the explosion killed five soldiers, together with six other persons."*

It remains to notice the claims of the Chinese to priority of invention in the case of the magnetic compass, and we may here refer to the sagacious investigations of Klaproth *sur l'invention de la Boussole*, in a letter addressed to M. de Humboldt.† The

* Royal Asiat. Trans., vol. i., p. 395. † Dated 1834.

first distinct notice in Europe, of the properties of the polarized needle, appears in a satirical poem of Guyot de Provins, about the year 1190; and the next writer who refers to the same phenomenon is Cardinal de Vitry, who visited Palestine in the fourth crusade, and a second time subsequently, at the beginning of the thirteenth century. He says distinctly, "*Adamas in India reperitur*;" and moreover adds, "*Acus ferrea, postquam adamantem contigerit, ad stellam septentrionalem, quæ velut axis firmamenti aliis vergentibus non movetur, semper convertitur; unde valde necessarius est navigantibus in mari.*" Subsequently to him, Brunetto Latini, author of a work in French called *Le Trésor*, written about 1260, observes likewise that it was calculated to be highly useful at sea; but at the same time notices the ignorant prejudice by which navigators were deterred from its adoption; for, says he, "No master mariner dares to use it, lest he should fall under the supposition of being a magician; nor would even the sailors venture themselves out to sea under his command, if he took with him an instrument which carries so great an appearance of being constructed under the influence of some infernal spirit." A more recent writer, the Jesuit Riccioli, states that "in the reign of St. Louis, the French mariners commonly used the magnetic needle, which they kept swimming in a little vessel of water, and prevented from sinking by two tubes."

From the above authorities, and one or two others, M. Klaproth, with sufficient reason, infers that the use of the magnetic needle was known in Europe at the beginning of the thirteenth century; but none of those writers state that it was *invented* in Europe; they rather afford a presumption that the knowledge of it was obtained during the crusades. That the mariners' compass was in use likewise among the Arabs about the year 1242 is proved by a citation from Baylak, an Arabian writer, who mentions it

as a contrivance generally known to navigators in the sea of Syria. M. Klaproth then proceeds to show that the Chinese compass was, about the year 1117, made exactly in the same manner as that seen by Baylak among the pilots of Syria. "It follows from all these facts," observes Klaproth, "that this species of compass was used in China at least eighty years previous to the composition of Guyot de Provins' satire; that the Arabs possessed it nearly at the same time; and that, consequently, this invention was communicated, either directly or indirectly, to the Arabs by the Chinese, and that the Arabs transmitted it to the Franks during the early crusades." Gioia of Amalfi, who is commonly supposed to have discovered the use of the needle at the commencement of the thirteenth century, probably obtained it from some Eastern traders.

The attractive power of the loadstone has been known to the Chinese from remote antiquity, but its property of communicating polarity to iron is for the first time explicitly noticed in a Chinese dictionary, finished in A.D. 121. Under the head of Loadstone appears this definition: "A stone with which a direction can be given to the needle." Père Gaubil, in his history of the Tang dynasty, states that he found, in a work written one hundred years later than the above, the use of the compass distinctly recorded. In a dictionary published in the reign of Kang-hy (not the *imperial* work which goes by his name) it is stated that under the Tsin dynasty (previous to A.D. 419) ships were steered to the south by the magnet. But it was not with the compass alone that the Chinese were so early acquainted: M. Klaproth has shown that they had observed, long before us, the variation of the needle from the true pole.

The author of a Chinese work on medicine and natural history has the following passage: "When a steel point is rubbed with the magnet it acquires

the property of pointing to the *south*; yet it declines always to the east, and is not due south. If the needle be passed through a wick made of a rush, and placed on water, it will also indicate the south, but with a continual inclination towards the point *ping*, or $\frac{1}{6}$ south." Klaproth then shows that such is actually the case at Peking, according to the observations of Père Amiot, who states as the result of his own experiments during a number of years, that "the variation of the magnetic needle continues the same in this capital, viz., between 2° and 2° 30′ to the west." Now as the Chinese suppose that the point of magnetic attraction is to the south, they of course reverse the foregoing terms, and say that the needle points *south*, with a variation *east*.

This very difference is a mark of the originality of the Chinese compass, which is further proved (as Mr. Barrow justly observes) by their having engrafted upon, and combined with it, their most ancient astrological notions. From the numerous specimens in this country, it may be seen that this instrument, instead of consisting of a moveable card attached to the needle, is simply a needle of less than an inch in length, slung in a glazed hole in the centre of a solid wooden dish, finely varnished. The broad circumference of this dish is marked off into concentric circles, on which are inscribed the eight mystical figures of Fohy, the twelve horary characters, the ten others which, combined with these, mark the years of the cycle, the twenty-four divisions of their solar year, the twenty-eight lunar mansions, &c.

The Chinese, however, appear to have applied the polarity of the magnet to a double purpose, and to have used it, in ancient times, as a guide on shore as well as at sea. This was effected by a machine called a *magnetic car*, in which was placed a little figure of a man turning on a point, and having its finger always direct[illegible] part of the hori-

zon. A representation of the car is inserted in Klaproth's work, as copied from a Chinese encyclopædia. It is stated, in a history of the Tsin dynasty, that the figure placed upon the car represented "a genius in a feather dress," and that when the emperor went out on state occasions, this car "always led the way, and served to indicate the four points of the compass." These magnetic cars were also known in Japan about the middle of the seventh century, as is proved from the testimony of Japanese works; but they admit that the invention came from China.

But however ancient their knowledge of the compass, the art of navigation among the Chinese has rather retrogaded than advanced in later times. It is clear that they once navigated as far as India, and their most distant voyages at present extend no farther than Java, and the Malay islands to the south. The principal obstacle to improvement consists in the unconquerable prejudice which forbids any alteration in the construction of their clumsy and unsafe junks. The hull of these in shape and appearance is not unlike a Chinese shoe, to which it is sometimes compared by themselves.* The stern is cleft, and as it were open, to admit the huge rudder, and thus shelter it in some measure from the blows of the sea; but, with the least sternway on the vessel, it seems calculated to prove fatal. In lieu of pitch, they calk with a putty composed of burnt gypsum and oil,† mixed sometimes with bamboo shavings for oakum. Their flat unyielding sails of mat enable them to lie much nearer to the wind, in light weather, than our ships can do with canvass sails: but then, on the other hand, the flat bottom,

* The *eye* painted on the bows has a singularly exact parallel in the *eye of Osiris*, painted on those curious models of Egyptian vessels contained in Mr. Salt's collection of antiquities sold lately in London.

† Extracted from the *Tung-shoo*, or Dryandra cordata.

without any keel whatever, occasions their falling fast to leeward, and gives the advantage altogether to our vessels. The clumsy anchors of the junks are made of a very heavy and hard wood, called by the Chinese *teih-mo*, "ironwood," and they have only a single arm in some cases.

Trading Junk.

It has been objected to the accuracy of Marco Polo, that he mentions junks having *more* than one sail to a mast, on the ground that "Chinese vessels do not carry any kind of topsail." The fact, however, is that they do very frequently, in light weather, and with the wind right aft, carry a topsail of canvass or cotton. These, with a view to holding as much wind, with as little perpendicular strain on

the mast as possible, are stretched to only about half the actual height of the sail; and they accordingly belly or bulge very much. It seems to have been proved by the experiments of Mr. Edgeworth on the resistance of the air, that a curved surface of the *same* perpendicular height holds more wind than a flat one; or that the pressure of the wind is increased by augmenting the surface on which it acts. Admitting this to be the fact, it seems to be in favour of the sagacity of the Chinese in this particular instance.

As long as their junks confine themselves to the neighbourhood of the coast, their course is pretty certain. They generally stand boldly across between the most prominent headlands, and are guided along the whole line of coast by a tolerably accurate directory, in which are noted the harbours, currents, shoals, and other particulars. The courses are pointed out by means of the figures, already described, on the circumference of their compass. They of course can take no observations of the sun themselves; but it sometimes happens that a junk sailing as far as Batavia will engage a Portuguese of Macao, who is just able, with an old rusty sextant, to take an altitude of the sun and work out the latitude in a rough way. This, however, is never done in short voyages, where they steer by their compass without any chart, and judge of the distances by the last promontory or island in sight; and long experience makes them very expert in this.

Mr. Gutzlaff was passenger in one of these junks from Siam to the north of China, and has given a very full and interesting account of the voyage, as well as of the management and internal economy of a Chinese trading vessel. Besides perpetual offerings to an image of the "Queen of Heaven," whom we have before mentioned as the sailor's deity, they worship the compass itself. This is covered with a

stripe of red cloth, some of which is also tied to the rudder and cable, the next objects of consequence to the sailors. Incense sticks are burnt, and gilt paper, made into the form of a junk, is kindled before it. The compass likewise constitutes head quarters on board. Near it, some tobacco, a pipe, and a burning lamp are placed, and here the crew adjourn to enjoy themselves. In a dead calm, a quantity of gilt paper shaped like a junk is set adrift, and offerings made to the goddess and sundry demons: but if all this proves ineffectual, the offerings cease, and they await the result in patience.

The account which Mr. Gutzlaff gives of the manning and discipline of these trading junks serves to explain in part the loss of so many at sea, when combined with the other imperfections attendant on their construction and management. They seem to be filled with the scum and offscourings of the Chinese population—abandoned and desperate characters who having nothing to lose, and who cannot subsist on shore. Besides the principal owner of the cargo, or agent for those who own it, there is the captain or pilot. He sits constantly on the weather side of the vessel, observing the shores and promontories as they are approached, and from habit seldom lies down to sleep. Though he has the nominal command over the sailors, these obey him or not, according to their pleasure; and sometimes scold or brave him like one of their own number. Next to the pilot is the helmsman, who manages the steering and sails. Besides clerks for the cargo, there is a purchaser of provisions, and another whose express business it is to attend to the offerings, and to burn incense. The crew consists of two classes: the able seamen, who are called *Tow-mo*, "heads and eyes;" and the ordinary seamen, or "comrades."

All these, with the exception of the last class, have sleeping berths, just large enough to hold one person. Every one is a shareholder, with the privi-

lege of putting a certain quantity of goods on board. The principal object of all is trade, and the working of the junk would seem to be a subordinate point. The crew exercise full control over the vessel, and oppose every measure which they deem injurious to their own interest; so that the captain and pilot are frequently obliged to submit to them. In time of danger the men often lose all courage; and their indecision, with the confusion that attends the absence of discipline, not unfrequently proves the destruction of the junk. Mr. Gutzlaff adds, that although they consider our mode of sailing as something better than their own,* they claim the superiority upon the whole for their own vessels, and would consider it as an imitation of barbarians to alter them. We are persuaded, however, that the risk of trouble and extortion on the part of the government is the chief obstacle to improvement in these respects. The Siamese have already adopted many things from our ships, and two *copper-bottomed* vessels came lately from Siam to Canton. On this very ground, the local government would not permit them to ascend the river much beyond Whampoa, the European anchorage.

The ingenuity of the Chinese is best displayed in their arts and manufactures on shore, and it is in nothing more conspicuous than the ready and simple modes in which they contrive to abridge labour, and occasionally to avail themselves of a mechanical advantage, without any of the aids of scientific knowledge. "Chance (says Dr. Abel) led me to the shop of a blacksmith, the manufacturer of various iron in-

* He was requested by the captain and others to explain the method of finding the latitude and longitude. When he had endeavoured to make them understand the theory, the captain wondered that he could bring (with the sextant) the sun on a level with the horizon; and insisted that by the same process he could "also tell the depth of water." But being disappointed in this, he exclaimed that observations "were entirely useless and truly barbarian."

struments, from a sword to a hoe. This man well understand the modifying properties of heat, and took the fullest advantage of them in all the practical concerns of his business. He was forming a reaping hook at the time of my visit. A large pair of shears, having one blade fixed in a heavy block of wood, and the other furnished with a long handle to serve as a lever, stood beside him. Bringing a piece of metal of the necessary dimensions from the forge at a white heat, he placed it between the blades of this instrument, and cut it into shape with equal ease and despatch."

In exemplification of the same point, we may quote another instance from the journal of Dr. Abel, who was a very intelligent observer. "A quantity of oil, recently taken from the mill, (where it had been pressed,) and contained in a wide shallow vessel, was continually agitated by a large copper pestle, with which a lad, for some particular purpose, gently struck its surface. The fatigue that would otherwise have arisen from the weight of the pestle, and uniform motion of the arm in using it, was prevented by the following very simple contrivance: a small bow of bamboo being fastened to the ceiling immediately over the vessel containing the oil, the pestle was attached to its string, and, thus suspended, it received from the slightest touch an adequate impulse, while the elasticity of the bow gave it the necessary recoil." In this manner it was worked by a young boy, who otherwise would not have had strength to manage the pestle.

With regard to some of their industrious arts, it may be a question whether they are original and indigenous, or borrowed from India; though with the known ingenuity of the Chinese, the presumption is in favour of the former. In cleaning cotton, they make use of a double process, in most respects similar to that known in India. The machine for freeing the cotton from its seed consists of two

wooden cylinders, placed horizontally one above the other, and very nearly in contact. These are put in motion by a wheel and treadle, and the cotton, being applied to one side of the crevice, is turned over by the revolution of the cylinders, or rollers, to the opposite; while the seeds, which are too large to enter between them, fall to the ground. The cotton is then freed from knots and dirt by the same process as in Hindoostan. A very elastic bow with a tight string is held by the carder over a heap of cotton wool. Pulling down the string with some force under a portion of the cotton, by means of a wooden instrument in his right hand, he suddenly allows the bow to recoil, and the vibration thus continually kept up scatters and loosens the cotton, separating it into fine white flocks, without breaking the fibre.

In some other instances, and indeed in most, no doubt can exist of the originality of invention; and the chief of these are the manufactures of *silk* and *porcelain*, which will presently be noticed. Their mode of making candles from the seed of the *croton sebiferum* is peculiar. This seed, which is contained in a three-lobed berry, is surrounded by a white substance not unlike tallow in consistence. It is first of all ground or crushed in an iron rut which forms the arc of a circle, and in which a heavy wheel, suspended from a beam above, works backward and forward. When ground it is heated over a fire to melt the vegetable grease, and then subjected to the press. The object is sometimes gained by boiling the bruised seed in water, and skimming the grease from the top. As this substance easily melts, the candles made from it are coated on the outside with wax. They burn rapidly, having a large wick, and give a very bad light, with a great deal of smoke. The mode of procuring the oil from the berry of the *Camellia oleifera* is nearly the same as in the case of the croton. The seed is first crushed by pounding or grinding, and then put over the fire in bags,

which are afterward removed to the press. This oil is rather of a fine and delicate quality, and used in cookery, like olive oil in the south of Europe.

In various branches of the manufacture of metals the Chinese possess considerable skill. They have the art of casting iron in very thin plates, and of repairing vessels thus constructed, by means of a small furnace and blowpipe, with which an itinerant workman goes his rounds. Their wrought-iron work is not so neat as our own, but extremely efficient. In point of cheapness, too, we excel them in this article; and it seems likely, that if Chinese models of iron implements, and tools of every kind, were brought home and exactly imitated at Birmingham and Sheffield, without any attempts at improvement in the general shape or adaptation, they might become an article of commerce. As it is, the Chinese only import our iron in bars, and work it up themselves. A conformity to their own native models should guide the preparation of nearly all articles for the Chinese market. They will scarcely look at what has a foreign fashion about it, even though it should be better than their own; always excepting, of course, clocks and watches, of which they admit the utility, but which they have now begun to manufacture for themselves, importing the springs and some other portions of the works from England.

Their white copper, which has much of the appearance of silver, has a close grain, and takes a good polish. It is an alloy of copper, zinc, and iron, with a little silver, and occasionally some nickel. When in the state of ore, it is said to be powdered, mixed with charcoal dust, and placed in jars over a slow fire, the metal rising in the form of vapour in a distilling apparatus, and being afterward condensed in water. It is sufficiently malleable to be converted into boxes, dishes, and various household utensils. The most singular application of this metal, however, is to the manufacture of certain teapots, which

are formed in a very puzzling manner *over an earthen vessel* of the same shape, which appears as an interior lining. The handle and spout are commonly of the stone called *jade*, to which the Chinese give the name of *yu*. The outsides of these teapots are generally cut with inscriptions and devices on the metal.

The highly sonorous nature of their *gongs* arises from the large proportion of tin in combination with copper. In the most considerable Budhist temples is always suspended a great cylindrical bell, which, however, is not rung like our bells, by swinging with a clapper, but struck on the outside with a large wooden mallet. The great bell at Peking, measured by one of the Jesuits, was fourteen feet and a half in height, and nearly thirteen in diameter. This, as well as most others of the kind, is very ancient; and with such antique specimens we may include the vases and tripods of bronze and other metals, on which the Chinese place great store, but which are generally rather too clumsy to possess much elegance. Another of their antiques in metal is the circular mirror, the speculum of which is formed apparently of a mixture of copper and tin, with perhaps a portion of silver. Some of the round metal mirrors, sold in Mr. Salt's collection of Egyptian antiquities, are surprisingly like these.

But there is a puzzling property in many of the Chinese mirrors which deserves particular notice, and we may give it together with the solution furnished by Sir David Brewster: "The mirror has a knob in the centre of the back, by which it can be held, and on the rest of the back are stamped in relief certain circles with a kind of Grecian border. Its polished surface has that degree of convexity which gives an image of the face half its natural size; and its remarkable property is, that when you reflect the rays of the sun from the polished surface, the image of the ornamental border and circles

stamped upon the back is seen distinctly reflected on the wall," or on a sheet of paper. "The metal of which the mirror is made appears to be what is called Chinese silver, a composition of tin and copper, like the metal for the specula of reflecting telescopes. The metal is very sonorous. The mirror has a rim (at the back) of about one fourth, or one sixth of an inch broad, and the inner part, upon which the figures are stamped, is considerably thinner.

"Like all other conjurers, (says Sir David Brewster,) the artist has contrived to make the observer deceive himself. The stamped figures on the back are used for this purpose. The spectrum in the luminous area *is not an image of the figures on the back*. The figures are a copy of the picture which the artist has *drawn on the face of the mirror*, and so concealed by polishing that it is invisible in ordinary lights, and can be brought out only in the sun's rays. Let it be required, for example, to produce the dragon as exhibited by one of the Chinese mirrors. When the surface of the mirror is ready for polishing, the figure of the dragon may be delineated upon it in extremely shallow lines, or it may be eaten out by an acid much diluted, so as to remove the smallest possible portion of the metal. The surface must then be highly polished, not upon pitch, like glass and specula, because this would polish away the figure, but upon cloth, in the way that lenses are sometimes polished. In this way the sunk part of the shallow lines will be as highly polished as the rest, and the figure will only be visible in very strong lights, by reflecting the sun's rays from the metallic surface."

Metallic mirrors are now very much superseded among the Chinese by the use of glass ones. Their looking-glasses, however, being extremely thin, and the surfaces not ground and polished like our plate glass, are very imperfect They are coated at the

back, like ours, with an amalgam of mercury. The glass at Canton is partly obtained by remelting what is broken after it comes from Europe: but it is certain that the Chinese import our flints chiefly for the glass manufacture.*

The last embassy observed that there were no glass windows near Peking, the universal substitute being a strong semi-transparent paper which comes from Corea. The Chinese explain this, by saying that no glass window has ever been found to be proof against such wide extremes of heat and cold as exist in the north of China. At Canton, it has sometimes been found that an unusual change of temperature has broken the panes; but this must have arisen from the pressure of the half seasoned and ill-constructed window frames on the glass. In their table utensils, the Chinese adhere to the use of porcelain in preference to glass, or any other material.

In the ornamental processes of carving wood and ivory, and other substances, the Chinese greatly excel the rest of the world. Those ivory balls, containing sometimes as many as seven or eight others in the interior, have long excited the surprise of Europeans, and even led to the supposition that some deception must be exercised, in joining the exterior balls after the others have been inserted. They are, however, really cut one within the other, by means of sharp crooked instruments working through the numerous round holes with which the balls are perforated, and which enable the workman to cut away the substance between, and thus to detach the balls from one another; after which the surfaces are carved. Their skill and industry are not less shown in cutting the hardest materials, as exemplified in their snuff bottles of agate and rock crystal, which are hollowed into perfect bottles of

* The materials are fused in a small reverberating furnace.

about two inches in length, through openings in the neck not a quarter of an inch in diameter: but more than this, the crystal bottles are inscribed on the *inside* with minute characters, so as to be read through the transparent substance!

The peculiar fashion of the Chinese tools in most cases proves their originality. Their carpenter's *saw* is formed of a very thin plate of steel, which for this reason is kept straight by a light frame of bamboo at the back, which serves at the same time as a handle. In appearance this has a heavy and clumsy look, but the lightness of the bamboo prevents it being so in reality. Carpenters work their *awls* with a thong, whose two extremities are attached to the two ends of a stick. The thong being quite slack, a single turn of it is taken round the handle of the awl, which is then worked backward and forward with great velocity. Some of the articles of furniture made for the English at Canton could not often, in point of neatness, be surpassed in this country, and in respect to solidity are sometimes superior.. The anvil of the Chinese blacksmith, instead of having a flat surface, is slightly convex or rounded. The iron that is worked upon it thus extends more easily under the hammer on all sides, but the metal probably loses something in solidity. The bellows consist of a hollow cylinder, the piston of which is so contrived that the blast shall be continuous.

But we have yet to say something of the two principal manufactures of China, those of *silk* and *porcelain*, the originality of which was never contested, as the introduction of both into Europe is perfectly well ascertained; and could the Chinese urge no other claims to praise on account of their ingenuity, these two alone might serve to give them a high rank among the nations of the world. D'Herbelot justly considers that as Rome obtained the silk manufacture from Greece, and Greece from Persia,

so the last was indebted for it, according to the best oriental authors, to China. The tradition, indeed, of the invention is there carried back into the mythological periods, and dates with the origin of agriculture. These two pursuits or professions, namely, husbandry and the silk manufacture, the chief sources of food and clothing, form the subject of one of the sixteen discourses to the people, which have been before noticed. It is there observed, that "from ancient times the Son of Heaven himself directed the plough: the empress planted the mulberry tree. Thus have these exalted personages, not above the practice of labour and exertion, set an example to all under heaven, with a view to leading the millions of their subjects to attend to their essential interests."

In the work published by imperial authority, called "Illustrations of Husbandry and Weaving," there are many wood cuts, accompanied by letter press explanatory of the different processes of farming and the silk manufacture. The former head is confined to the production of *rice*, the staple article of food, and proceeds from the first ploughing of the land to the packing of the grain; the latter details all the operations connected with planting the mulberry and gathering the leaves, up to the final weaving of the silk. Besides the common mulberry of China, which differs somewhat from that of Europe, they occasionally, in feeding the worms, have recourse to a wild specimen of the *morus* tribe, as well as to the leaves of another tree, supposed to be a variety of ash. The production of silk in the Chinese method, and with the aid of natives of the country, was tried experimentally by the East India Company at St. Helena; but has been abandoned, with the rest of their establishments on that island, since the expiration of the charter. The principal object, in the cultivation of the mulberry for feeding silkworms, is to produce the greatest quantity of

young and healthy leaves without fruit. For this reason the trees are not allowed to exceed a certain age and height. They are planted at a convenient distance from each other, on the plan of a quincunx, and are said to be in perfection in about three years.

The mulberry tree for silkworms is chiefly cultivated in Che-keang, which province, together with the only three others that produce fine silk, namely, Keang-nan, Hoo-pe, and Sze-chuen, is crossed by the *thirtieth* parallel of latitude. Che-keang is a highly alluvial country, intersected by numerous rivers and canals, with a climate that corresponds pretty nearly to the same latitude in the United States of America. The soil is manured with mud which is dug from the rivers, assisted with ashes or dung; and the spaces between the trees are generally filled with millet, pulse, or other articles of food. The time for pruning the young trees, so as to produce fine leafy shoots, is at the commencement of the year. About four eyes are left on every shoot, and care is taken that the branches are properly thinned, with a view to giving plenty of light and air to the leaves. In gathering these, they make use of steps, or a ladder with a prop, as the young trees cannot support a ladder, and would besides be injured in their branches by the use of one. The trees, with their foliage, are carefully watched, and the mischiefs of insects prevented by the use of various applications, among which are some essential oils.

The young trees of course suffer by being stripped of their leaves, which are the *lungs* of plants, and this is an additional reason for renewing them after a certain time. They endeavour in part to counteract the evil effect, by pruning and lopping the tree, so as to diminish the wood when the leaves have been stripped, and it is probable that a few leaves are left on. It is surprising, however, to observe how soon a tree in those climates will re-

cover its leaves in the summer or autumn, after having been entirely stripped of them by a typhoon, or hurricane. Fresh plants are procured by cuttings or layers, or sometimes from seed. When the trees grow too old for the production of the finest leaves, and show a greater tendency to fruiting, they are either removed altogether, or cut and managed so as to produce fresh and young branches.

Mr. Barrow, who observed the management of the trees and silkworms in Che-keang, confirms the usual Chinese accounts by saying that "the houses in which the worms are reared are placed generally in the centre of each plantation, in order that they may be removed as far as possible from every kind of noise; experience having taught them that a sudden shout, or the bark of a dog, is destructive of the young worms. A whole brood has sometimes perished by a thunder storm." The chambers are so contrived as to admit the use of artificial heat when necessary. Great care is taken of the sheets of paper on which the multitudes of eggs have been laid by the silkworm moths; and the hatching of their eggs is either retarded or advanced, by the application of cold or heat according to circumstances, so as to time the simultaneous exit of the young worms exactly to the period when the tender spring leaves of the mulberry are most fit for their nourishment.

They proportion the food very exactly to the young worms by weighing the leaves, which in the first instance are cut, but afterward, as the insects become larger, are given to them whole. The greatest precautions are observed in regulating the temperature of the apartments, and in keeping them clean, quiet, and free from smells. The worms are fed upon a species of small hurdles of basketwork, strewed with leaves, which are constantly shifted for the sake of cleanliness, the insects readily moving off to a fresh hurdle with new leaves, as the scent

attracts them. In proportion to their growth, room is afforded to them by increasing the number of these hurdles, the worms of one being shifted to three, then to six, and so on until they reach their greatest size. The hurdles, as well as the rest of the apparatus, were sent from Canton to St. Helena, for the use of the company's establishment there. When the worms have cast their several skins, reached their greatest size, and assumed a transparent yellowish colour, they are removed into places divided into compartments, preparatory to their spinning.

In the course of a week after the commencement of spinning, the silken cocoons are complete, and it now becomes necessary to take them in hand before the pupæ turn into *moths*, which would immediately bore their way out, and spoil the cocoons. When a certain number, therefore, have been laid aside for the sake of future eggs, the pupæ in the bulk of the cocoons are killed by being placed in jars under layers of salt and leaves, with a complete exclusion of air. They are subsequently placed in moderately warm water, which dissolves the glutinous substance that binds the silk together, and the filament is wound off upon reels. This is put up in bundles of a certain size and weight, and either becomes an article of merchandise under the name of "raw silk," or is subjected to the loom, and manufactured into various stuffs for home or for foreign consumption. Notwithstanding the apparent simplicity of their looms, they will imitate exactly the newest and most delicate pattern from England or France. The Chinese particularly excel in the production of damasks and flowered satins. Their crape has never yet been perfectly imitated; and they make a species of *washing* silk, called at Canton *ponge*, which becomes more soft as it is longer used.

With regard to the *porcelain* of the Chinese, it is indisputably the original from which the similar manufactures of Europe were borrowed. The first

porcelain furnace on record was in Keang-sy, the same province where it is now principally made, about the commencement of the seventh century of our era: but the famous furnaces of *King-te-chin*, just to the eastward of the Poyang lake, were not established until about A.D. 1000. In the progress of the last embassy through the country we observed that the largest quantities of porcelain were exhibited for sale at Nanchang-foo, just to the southward of the lake, from whence there is a water communication with *King-te-chin*. The Chinese have a printed history of the furnaces of this place, contained in four volumes; but the main difficulty, in a translation, would be to identify the various substances used in the manufacture with the names by which they are distinguished in the original work. It is well known that the chief merit of the Chinese ware consists in its hardness, in the fineness of the fracture, and in the resistance which it offers to heat without cracking. The better kinds have never yet been surpassed in point of *substance*; but as regards the painting and gilding, they must yield to the productions of England and the continent.

The principal ingredients employed in the manufacture of the porcelain of China have been pretty well ascertained. It was soon discovered that the *Kao-lin*, mentioned by Père Dentrecolles in Du Halde, was the felspar clay, or porcelain earth of Europe. The neighbourhood of the Poyang lake was observed, by our embassics, to abound in those disintegrating granite rocks which supply the largest quantity of that material. The detailed account of the manufacture by Dentrecolles was calculated to convey little information regarding the real substances used by the Chinese; but some specimens of the various materials, which were subsequently sent to France from China, enabled our neighbours to imitate the ware, and establish the commencement of the manufacture. It has been satisfactorily shown by Mars

den, that the word porcelain, or *porcellana*, was applied by Europeans to the ware of China, from the resemblance of its fine polished surface to that of the univalve shell so named; while the shell itself derived its appellation from the curved or gibbous shape of its upper surface, which was thought to resemble the raised back of a *porcella*, or little hog.*

Silica and alumine, or flint and clay, being the principal constituent of all chinaware, the *Kao-lin* of Dentrecolles is the clay, and the *pe-tun-tse* is the silica. The following facts are pretty well ascertained from the Chinese. They state that Kao-lin, or, more correctly, *Kaou-ling*, which means "lofty ridge," (probably where the granite is most exposed to disintegration,) is mixed with small shining particles, meaning the *mica*, with which it naturally abounds. Of the *pe-tan-tse*, they observe that it is white, hard, and with a smooth surface. The former material is said to require less labour than the latter, or, in other words, it is a soft clay, while the latter is a very hard and stony substance. The Kaou-ling is dug from the mountain, "wherever the outer surface of the earth is of a reddish colour, and abounds in shining particles." The *pe-tun-tse* is pounded with difficulty in mortars, the pestles of which are worked by a stream, and the powder being reduced to a fine paste by mixture with water, it is made up into cakes fit for use, and sold to the manufacturers. The Chinese say that the former material derives strength from the latter, which is obtained from the hardest rocks. Another substance used by them is *hua-she*, "slippery stone," which is steatite or soapstone; and a fourth is *she-kaou*, alabaster or gypsum, which they say is used in the painting process after it is burnt. On approaching the neighbourhood of *King-te-chin* from the eastward, the late Sir George Staunton observed several excavations, made in extract-

* Marco Polo, p. 428, Note.

ing from the sides of the adjoining hills the *pe-tun-tse*. He says it was a species of fine granite, in which the *quartz* (or silica) *bore the largest proportion*. He afterward remarked some quarries, out of which were dug stones beautifully white and shining; they consisted, he says, of *quartz in its purest state*. There can be no doubt, therefore, respecting the two principal ingredients of Chinese porcelain. It would seem that Kaou-ling is the "growan clay," and *pe-tun-tse* the "growan stone" of Cornwall; and the granite mountains by which the Poyang lake is surrounded afford an abundance of both those materials. There is another manufactory at *Chaou-king-foo*, to the west of Canton, which supplies the limited demand of the European and Indian trade; but it is greatly inferior in reputation to King-te-chin.

The vitreous glaze of the Chinese porcelain is obtained by the union of the *pe-tun-tse*, or silica, with the ashes of fern, abounding on the same steep hills that afford the other materials. The glassy combination of flint and alkali, called by chymists a *silicate*, is well known to give to porcelain its polished surface. The Chinese call this "varnish" or "oil," with an allusion to their lackered or japanned ware. In proof of the difficulty of acquiring any real information from the descriptions of Dentrecolles, we may quote his odd observation, that "this oil or varnish is got from a very hard stone, which is not very surprising, since it is stated that stones are formed of the *salts* and *oils* of the earth." This was written more than a hundred years since, and seems to mean the combination of the powdered quartz with the alkali in the formation of the glaze.

In the third part of Dr. Morrison's Dictionary, under the head of "porcelain," are some extracts from the history of the furnaces at King-te-chin. It is observed that *Kaou-ling* is the name of a hill on the east side of the place of manufacture, and

that the earth procured from thence was the property of four different families, whose names were therefore stamped on the cakes of the material. The best *pe-tun-tse* is obtained near *Hoey-chow*, in the adjoining province of Keang-nan. It is pounded with pestles, which are worked by means of cogged wheels, turned by a mountain stream. After pounding the stone, they reduce it to a nearly impalpable powder by suspension, and subsequent settlement in water; after which they mould it into bricks and sell it to the people at the potteries. The government of China, for more than a thousand years past, has paid much attention to the manufacture of porcelain, and especially to that at *King-te-chin*, which pertains to the chief city Jaou-chow-foo. The Emperor Kien-loong sent a person from Peking to make drawings of the whole process in its details.

In a voluminous Chinese work, the subjects of these drawings, which were twenty in number, are described at length. They commence with the process of procuring the materials and making the paste. Then is represented the business of preparing the ashes for the glazing, and mixing them with the silica, so as to form a thickish liquid. Earthen cases are provided, in which to bake the ware, the round portions of which are turned on a lathe, and the others made in a mould. The subject of another picture is the selection of the "blue material," which is supposed to be cobalt. After being turned on a lathe, or formed by a mould, the unburnt *biscuit* (as workmen call it) is finished by smoothing and paring off all the inequalities by the hand, the bits taken off being pounded and worked to a milky consistence, to be used by the painters. In painting the ware, one set of people design the outline, and another fill in the colours; and the Chinese say that this division of labour is to "concentrate the workman's hand, and not divide his mind." It is said that, previous to baking, the same specimen of ware passes

through twenty hands, and that before being sold, it has gone through more than double that number. The pictures proceed to represent the baking of the ware in open and in close furnaces, and when it is completed, the process of binding it with straw, and packing it in tubs for sale.

The whole series of drawings concludes with the ceremony of sacrificing and giving thanks to the god of the furnaces; and this god, according to Dentrecolles, owed his origin to the difficulties encountered by the workmen in executing some orders from Peking, on account of the emperor. Several models were sent from thence of a shape and size which defied all the efforts of the people to imitate them; and though representations were made to that effect, these served only to increase his majesty's desire to possess the specimens required. With a view to meet the emperor's inclination, much money and labour were spent, and both rewards and punishments held out to the people employed, but all in vain; when one of the workmen, reduced to despair by the result of his unavailing efforts, threw himself into the red-hot furnace, and was instantly consumed. The story says that the specimens then baking came out perfectly fine and conformable to the model, and from that time hence the unfortunate victim passed for a divinity, becoming the god of the furnaces.

In connection with the subject of Chinese porcelain, it remains to mention a curious discovery lately made in Egypt. In a note to an article of the Quarterly Review on *Egypt and Thebes*,* it is remarked, "Signor Rosellini showed the other day to a friend of ours at Florence a sort of smelling-bottle, evidently of *Chinese Porcelain*, and with characters to all appearance Chinese! This was found by Rosellini himself in a tomb, which, as far as could be ascer-

* No. cv., February, 1835.

tained, had not been opened since the days of the Pharaohs." Three of the same little bottles, which were also discovered in Egypt, and brought home by Lord Prudhoe and by Mr. Wilkinson, have been examined by the writer of these pages, who can vouch for their being *identical* in shape and appearance (though not in the fineness of the porcelain) with the smelling and snuff bottles manufactured at this day by the Chinese. It so happened that he had in his possession a real Chinese bottle of recent manufacture, and it corresponded so closely in size and shape with the bottles found in the Egyptian tombs, that he presented it to the owner of two of them, that it might be associated with its ancient likenesses. The following is the substance of the information relating to the antique bottles from Egypt.

In journeying up the Nile, looking out for antiquities, the travellers stopped at Coptos. A Fellah offered for sale two bottles nearly alike in inscription and of the same form. They were both purchased, and with them a fragment of a statue without an inscription, but which in workmanship was of the later dynasties. At Coptos are temples of the earlier dynasties, (Tothmes III., who probably reigned about Joseph's time,) down as late as the Roman Cæsars; but all the antiquities of smaller dimensions, there purchased, appear to have been of the later Egyptian dynasties—say about the time of Psammeticus. Mr. Wilkinson gave one of the bottles to the British Museum; the other is in the possession of Mr. Pettigrew.

The whole, with the exception of the two *white sides*, is of a light green colour, similar to that with which the Chinese frequently paint the ground of their porcelain vessels; often the *insides* of them. The sketch of some vegetable production is slightly executed on one side of the bottle; the stalk and leaves have the appearance of a drawing in Indian ink, being of a pale watery black, and the flower is of light

red. The style of this slight sketch is precisely Chinese. On the reverse side are five characters, just like the *runninghand* of the Chinese, in Indian ink: three of them can be identified with characters now in use; but two others are so contracted as to be unintelligible, and the connection of the inscription is lost. The interior of the bottle contained a small quantity of a black and nearly impalpable powder, which had a carbonized appearance. This strange relic, had it been met with in China, would have excited little notice, being so like other bottles of the same shape and size actually in use; but its ascertained discovery in an *Egyptian tomb* is a matter for endless speculation.

The *lackered* or varnished ware of the Chinese, though by their own admission inferior to that of Japan, is occasionally, in the hands of the best workmen, a beautiful manufacture. It varies, however, from the polished jetty surface of the magnificent folding screens, sometimes brought home to this country, down to the articles of daily use made for the Chinese themselves, in the shape of tubs, trays, and wash-hand basins, with the ornamental parts of their buildings. These coarser varieties are derived from the nuts or seeds of the dryandra cordata, while the finer kind is obtained from the gum of a species of rhus. The chief expense of the manufacture arises from the care with which the consistence of the varnish must be regulated in laying it on, and the number of repetitions required in the finer kinds of ware, of which each successive coat must be allowed a considerable time to dry before it is again touched. When first introduced to Europe, this manufacture was highly appreciated, and the export from Canton considerable; but the improvements in our own productions have reduced the quantity now in demand to something very small.

The native ingenuity of the Chinese, to which

themselves and the rest of the world have apparently been indebted for so many important and useful inventions, has been recorded by the late Sir George Staunton, on occasions when their efforts were required by the embassy. "Two of them (says he) took down the two magnificent glass lustres sent as presents to the emperor, in order to place them in a more advantageous position. They separated them piece by piece, and put them again together in a short time without difficulty or mistake, the whole consisting of many thousand minute pieces, though they had never seen anything of the kind before. Another Chinese cut a narrow strip from the edge of a curved plate of glass, in order to supply the place of one belonging to the dome of the planetarium, which had been broken in the carriage. The English mechanics belonging to the embassy had in vain attempted to cut the glass according to this curved line, with the assistance of a diamond. The native workman did not show his method; but it was said that he succeeded by first drawing the point of a heated iron across the surface to be divided."*

As relates to the fine arts, or those which minister rather to the pleasures than the wants of mankind, it becomes necessary to make some allowances for the peculiarities of national taste, which has generally been admitted to be the most conventional and capricious thing in the world, being determined by the infinite varieties of national character, models, and associations. The arts of drawing and painting do not rank so high among the Chinese as among ourselves in Europe, and having therefore met with less encouragement, they may be expected to have made less progress. In works that do not require a scientific adherence to the rules of perspective, they are sometimes very successful. They

* Embassy, vol ii., p 288

paint insects, birds, fruits, and flowers, very beautifully, and nothing can exceed the splendour and variety of their colours. Native artists have often been employed at Canton and Macao, by English naturalists, in delineating various specimens in botany and zoology; and under proper direction they have been found capable of giving a correct and scientific representation of the various objects, as well as a brilliant and well-coloured drawing. One thing in our European art they do not fully enter into, which is *shading;* and they positively object to the introduction of shadows in painting. Mr. Barrow states, "When several portraits by the best European artists, intended as presents for the emperor, were exposed to view, the mandarins observing the variety of tints occasioned by the light and shade, asked whether the originals had the right and left sides of the figure of different colours. They considered the shadow of the nose as a great imperfection in the figure, and some supposed it to have been placed there *by accident.*"

Though the Chinese certainly do not practise the art of perspective in its correctness, or according to any regular rules, it would be a mistake to suppose that it is always entirely neglected. Their artists, at Canton at least, have taken hints from European performances in this respect, and their drawings by the eye are often tolerably correct as to perspective, though light and shade are still neglected. The wood cuts in Chinese books are generally executed almost entirely in outline, which is occasionally very spirited as well as faithful. The drawings which they chiefly value among themselves are in water colours and Indian ink, sketched in a very slight manner upon either fine paper or silk. A favourite subject with them is the bamboo, which is represented in all the different stages of its growth, from the tender shoot, just appearing above the earth, (when they use it for food, as we do asparagus,) up

to the period of its producing its grasslike flowers and seeds.

In connection with drawing and the imitative arts, we may observe that the Chinese style of ornamental gardening, and of laying out pleasure grounds, has been very much overdrawn by Sir William Chambers, in an essay on that subject, which may be considered quite as a work of imagination in itself. Mr. Barrow, however, who resided for a considerable time at *Yuen-ming-yuen*, "the garden of perpetual brightness," which is an extensive pleasure ground of the emperor, lying northwest of Peking, and greatly exceeding Richmond Park in extent, has given a favourable account of their taste in this department of the arts. "The grand and agreeable parts of nature," he observes, "were separated, connected, or arranged, in so judicious a manner as to compose one whole, in which there was no inconsistency or unmeaning jumble of objects; but such an order and proportion as generally prevail in scenes entirely natural. No round or oval, square or oblong lawns, with the grass shorn off close to the roots, were to be found anywhere in those grounds. The Chinese are particularly expert in magnifying the real dimensions of a piece of land, by a proper disposition of the objects intended to embellish its surface; for this purpose tall and luxuriant trees of the deepest green were planted in the foreground, from whence the view was to be taken; while those in the distance gradually diminished in size and depth of colouring; and in general the ground was terminated by broken and irregular clumps of trees, whose foilage varied, as well by the different species of trees in the group, as by the different times of the year in which they were in vigour; and oftentimes the vegetation was apparently old and stunted, making with difficulty its way throught the clefts of rocks, either originally found, or designedly collected upon the spot.

The effect of intricacy and concealment seemed also to be well understood by the Chinese. At Yuen-ming-yuen a slight wall was made to convey the idea of a magnificent building, when seen at a certain distance through the branches of a thicket. Sheets of made water, instead of being surrounded by sloping banks, like the glacis of a fortification, were occasionally hemmed in by artificial rocks, seemingly indigenous to the soil. The only circumstance which militated against the picturesque in the landscape of the Chinese was the formal shape and glaring colouring of their buildings. Their undulating roofs are, however, an exception to the first part of the charge, and their projection throws a softening shadow upon the supporting colonnade. Some of those high towers which Europeans call pagodas are well adapted objects for vistas, and are accordingly for the most part placed on elevated situations."

In sculpture, understood as the art of cutting stone into imitative forms of living objects, the Chinese are extremely defective. Their backwardness in this, as well as in other branches of the fine arts, has been justly ascribed to the little communication they have with other nations, and the want of encouragement at home, founded on the policy and practice of discountenancing *luxury* and promoting *labour*, particularly that which is employed in producing food for man. Their sculptured figures in stone are altogether uncouth in form and proportion; but their deficiency in this respect is in some degree made up by a very considerable share of skill in *modelling* with soft materials. For this reason it is that their gods are never represented in stone, but in modelled clay. No great anatomical skill is called for on these occasions, as the figures are always pretty fully clothed, and exhibit no such specimens of nudity as abound in the Grecian Panthcon. Still the drapery is generally executed with remarkable truth and effect, and this feature often drew the at-

tention of those who composed our embassies, in their visits to the various temples which occurred in the route.

It remains only to say a few words relative to the Chinese art of music. On this point Mr Hüttner, who was attached to Lord Macartney's mission, was of opinion that "their gamut was such as Europeans would call imperfect, their keys being inconsistent, that is, wandering from flats to sharps, and inversely, except when directed by a bell struck to sound the proper notes. The Chinese in playing on instruments discovered no knowledge of semitones, nor did they seem to have any idea of counterpoint, or parts in music. There was always one melody, however great the number of performers; though, in a few instances, some of the instruments played in the lower octave, while the rest continued in the upper, and thus approached to harmony." Their instruments are mostly tuned in unison, and they have little or no idea of accompaniments. The antiquity of music in China is proved by its being frequently mentioned by Confucius himself, and the encouragement which he gives to its cultivation might have been expected, in the course of time, to produce something better than the imperfect art which now exists there. They have certain characters to express the name of every note in their very limited scale. These they use in writing down their airs; but whether this mode of notation is indigenous, or whether they obtained it from the Jesuits, is doubtful. It is indeed stated that the Emperor Kâng-hy was much surprised when P. Pereira pricked down the Chinese tunes as they were played, and repeated them afterward.

Their instruments are very numerous, consisting of different species of lutes and guitars; several flutes and other wind instruments; a squeaking fiddle with three strings; a sort of harmonicon of wires, touched with two slender slips of bamboo; systems

of bells and pieces of sonorous metal; and drums covered with snakeskin. In lieu of catgut, they string their instruments with silk and wire. Many of the Chinese have a ready ear for music, though accompanied by such a bad national taste. The magistrate of the Macao district was on a visit to the writer of this, when the piano being touched with a Chinese air, of which the music is given in Barrow's Travels, he immediately turned with a look of pleased surprise, and named the tune.

Among the Chinese instruments we must not forget to mention one which emits, as nearly as possible, the tones of the Scottish bagpipe, without the buzzing sound that is produced by what is called the *drone* of the latter. The melody of the Chinese and Caledonian pipes is so exactly similar, that it has never failed to excite the attention of the Scotch who have visited China; and indeed the recognition has been mutual, for when a Highland piper (who had been taken out in an Indiaman) was sent up to Canton to attend a meeting of the sons of St. Andrew on the national anniversary, the Chinese were no less struck with the picturesque costume of the plaided Gael than ravished by the strains which proceeded from his instrument. It may be hoped that, in this respect, they evinced a more correct taste than was displayed by one of the sailors on board the same ship with the Highlander. It was on one of the occasions when the latter, with pistol and dirk at his side, was parading the deck with his pipes, that the unlucky Jack, tempted by the mere spirit of mischief, or willing to lower the *inflation* of his Scottish shipmate, snatched up a young pig, and placing it between his right arm and his side, squeezed the poor animal until it emitted sounds as loud at least, if not as musical, as those of the instrument which it thus unconsciously burlesqued. The action was so irresistibly comic, that shouts of laughter echoed through the ship; and the piper would have been

provoked to take summary vengeance on the author of the jest, had he not been prevented by the interference of the bystanders.

CHAPTER XVIII.

SCIENCES.

Distribution of human Knowledge under three heads.—Union of Astrology with Medicine.—Scheme of Physics.—Same as in Europe formerly.—Practice of Medicine.—Use of the Moxa, or Cautery.—Ignorance of native Doctors.—Introduction of Vaccination by Mr. Pearson.—Chymical Practice.—Mercurial Preparations.—Science of Numbers.—Geometry.—Geography.—Astronomy.—Of Hindoos and Chinese compared.—Lunar Year, and Cycle of Sixty Years.—Almanac.—Mechanics and Machinery.—Architecture.

The Chinese profess to make a general distribution of human knowledge under the three heads of "Heaven, Earth, and Man," and this may appear to some readers to be not altogether unlike the threefold division proposed by Lord Bacon, of "God, Nature, and Man." A well-known encyclopædia, in sixty-four volumes, called *San-tsae-too-hoey*, which dates about the end of the sixteenth century, consists of wood cuts, illustrated by letter press, in the three departments above stated. This work, however, having been the compilation of one person only, and consisting chiefly of plates, is superficial even for the Chinese, and does not contain a full account of their science such as it is. The character of the book may be partly gathered from the following account of its contents and method of arrangement. Under the head of *Heaven*, of course comes astronomy, and this includes something of what was

learned from the Arabians and Europeans. The department of *Earth* includes principally their imperfect notions of geography. The third division, that of *Man*, is by far the most copious. It contains representations of persons famous in history, and of different tribes of men. Then is introduced the subject of the Chinese cycle, (which rather belongs to the first department,) and of the numerical combinations of Fo-hy. Next come buildings; furniture; implements used in husbandry, manufactures, and the arts of peace; arms and warlike weapons; wood cuts in anatomy; costumes; games of skill; specimens of ancient inscriptions; botany and natural history, as applicable to medicine; active sports and exercises; specimens of coins and money.

The actual state of the sciences in China may, perhaps, be ranked with their condition in Europe some time previous to the adoption of the inductive method in philosophy. The constitutional ingenuity and industry of the people has led them to fall upon various practical results, in spite, as it would seem, of a feature in their character and habits which is opposed to the progress of knowledge. They profess to set no value on *abstract* science, apart from some obvious and immediate end of utility. Among ourselves, the practical *application* of scientific discoveries is sometimes long subsequent to the discoveries themselves, which might, perhaps, never have been made, had not science been followed up through its bypaths for its own sake merely, or with a very remote view to utility in practice. The Chinese always estimate such matters by their immediate and apparent *cui bono*. Dr. Abel relates, that after satisfying a mandarin in reply to his questions concerning some of our useful manufactures, he took occasion to mention that we had metals, which on coming in contact with water burst into flame. "I had some potassium with me, (he adds,) and was desirous of showing its properties to him. He immediately in-

quired concerning its *uses*, and, when these could not be very satisfactorily explained to him, looked too contemptuously to induce me to venture an experiment." And yet this discovery of the metallic base of *potash* was one result of the investigations of Sir Humphrey Davy, whose practical applications of his scientific discoveries, to useful and beneficial purposes, were of such inestimable value and importance.

A surprising enumeration might be made of instances in which the Chinese appear to have stumbled, by mere chance, upon useful inventions, without the previous possession of any scientific clew. Cases, however, occur in which it may be fairly suspected that they were indebted to the European missionaries. Without knowing anything, for instance, of that theory of optics which treats of the convergence and divergence of rays of light by lenses of different shapes, they use both convex and concave glasses, or rather crystals, to assist their sight. We noticed in the last chapter that they possess glass in a very course and inferior state, and that at Canton they sometimes melt down broken glass from Europe. In spectacles, however, the want is supplied, all over the empire, by the use of rock crystal. This is ground with the powder of corundum; and if anything could prove the Chinese spectacles to be original inventions, or not borrowed from Europe, it would be their very singular size and shape, as well as the strange way of putting them on. The annexed cut represents a pair of these primitive optics, slung over the ears with silken strings and weights, and imparting, by their immense size, a most sapient appearance to the wearer.

For checking the glare of the sun, they make use of a mineral which they call *Cha-she*, or "teastone," from the resemblance of its transparent hue to a weak infusion of black tea. This, in all probability,

is a smoky quartz, or silex allied to the *cairngoram* of Scotland. In some instances the Chinese have been known to attempt slavish copies of European

Spectacles.

telescopes; but a little science became requisite in the construction of instruments consisting of compound lenses, and they accordingly failed. When, however, a few specimens of Sir David Brewster's optical toy, the kaleidoscope, first reached Canton, these were easily imitated. The Chinese became exceedingly taken with them; vast numbers were immediately manufactured on the spot, and sent up the country, under the appropriate name of *Wan-hua-tung*, or "tubes of ten thousand flowers."

The jargon employed in their pseudo science, and the singular resemblance which this bears to the condition of physical knowledge, not very long ago, even in our own country, is deserving of some re-

mark. It is pretty generally known that, within a comparatively recent period of our history, the sciences of medicine and astrology were very gravely combined. A rather handsome monument in Mortlake churchyard, dated as late as 1715, bears a Latin inscription to the memory of "John Partridge, Astrologer and Doctor of Medicine, who made physic for two kings and one queen, to wit, Charles II., William III., and Queen Mary." It was the deplorable condition of the healing art, about or a little before that period, in France, also, that exposed it to the unmerciful ridicule of Molière. It is likely that most readers may not have fallen in with a thick quarto volume, dated 1647, and entitled "A modest Treatise of Astrologie, by William Lilly."* The work is dedicated to Bolstrod Whitlock, Esq., Member of Parliament, and, among other matter, contains "Astrologicall aphorisms beneficiall for physicians;" as, "He that first enters upon a cure in the hour of Mars shall find his patient disaffected to him, and partly disdain and reject his medicines, his pains ill rewarded, and his person slighted." In the same work are expounded the supposed connections between the several planets and the parts of the body: "He will be infinitely oppressed," says this learned Theban, "who in the hour of Mars shall first get a *hot* disease, and in the hour of Saturne a

* The person ridiculed by Butler under the name of Sidrophel, who is made to defend his art in the following convincing manner:—

"Is it not ominous in all countries
When crows and ravens croak upon trees?
The Roman senate, when within
The city walls an owl was seen,
Did cause their clergy, with lustrations,
(By'r synod call'd humiliations.)
The round-faced prodigy t' avert
From doing town and country hurt:
And if an *owl* have so much power,
Why should not *planets* have much more!" &c.

cold one;" "When Jupiter is author of the sickness, he demonstrates ill affection of the liver;" "Mars being the cause of a feaver, and, in Leo, shews ebolition or a boyling of the humours, continual burning feavers, whose originall cause springs from the great veines near the *heart*."

Compare this with the following scheme of Chinese physics, on which are based all their medical, as well as other theories, and in which will be perceived precisely the same relations as those noticed in the foregoing quotations from Lilly. They have also some vague notions of the *humoral pathology*, long since exploded in this country, but alluded to in the above extracts. "They talk," as Dr. Abel correctly states, "of ulcers being outlets to noxious matter, and divide diseases and remedies into two classes, *hot* and *cold*, depending greatly on purgatives for driving out the heat of the body."

CHINESE SCHEME OF PHYSICS.

Five Planets.	Five Viscera.	Five Elements.	Five Colours.	Five Tastes.
Saturn	Stomach	Earth	Yellow	Sweet
Jupiter	Liver	Wood	Green	Sour
Mars	Heart	Fire	Red	Bitter
Venus	Lungs	Metal	White	Pungent
Mercury	Kidneys	Water	Black	Salt

In treating of the planets and their significations, "Saturne (quoth Lilly) is cold and dry, melancholic, *earthly*;" "Jupiter governeth all infirmities in the *liver*; of colours, sea-green or blew, a mixed yellow or *green*;" "Mars, in nature hot and dry, he delighteth in *red* colour, and in those savours which are *bitter*, sharp, and burn the tongue;" "Venus, in colours she signifieth *white*;" "Mercury, in the elements he is the *water*." All this looks very much as if the philosophy of our forefathers was derived intermediately from China; and it is this easy plan of *systematizing without experiment*, that has kept the latter country in the dark, and infested every department

of its physical knowledge; while the inductive philosophy recommended in the *novum organon* of Bacon has done such wonders in Europe. As a specimen of Chinese reasoning, nothing can well be imagined more silly than the following: "The upper half of the body partakes of the *Yang*,* and the nature of the heaven, and the medicines suited to that part of the body are the heads of plants: the body of the plant is for diseases of the middle," &c.

And yet when they condescend to abandon their theories, and to be guided by observation and common sense, they can occasionally talk very differently. Dentrecolles translated a medical treatise composed by a Chinese practitioner, and called *Chang-seng*, or "long life," being in fact an essay on diet and regimen. This, as it proceeds entirely on the personal experience of the individual, really contains something that is both true and useful. Among us, such a work might be arranged under the four heads of Air, Exercise, Diet, and the Passions. Our Chinese author has likewise chosen four heads, but calls them, "the Passions, Diet, the Actions of the Day, and the Rest at Night," comprising, however, much that is the same in reality under different names. They have a high notion of the value of sleep; and their maxim is, that "one sleepless night cannot be compensated by ten nights of sleep."

As remarked by Dr. Abel, the drugshops of the Chinese contain an immense list of simples, a few gums, and some minerals. These are sold in small packets, each containing a dose enveloped in a wrapper which describes the use of the medicine. Chinese doctors paste up and distribute handbills, in the same manner with the lower walks of the faculty among us, and generally with reference to the same diseases. The druggist's shops are remarkable for their superior cleanliness, and not unlike those of

* See page 69.

Europe in the arrangement of the drawers, jars, &c It is well known that the most considerable work on Chinese materia medica is the famous *Pun-tsaou*, or Herbal, which is not confined to botany merely, as its name might imply, but extends to the animal and mineral kingdoms also. At the head of all remedies stands *ginseng*, which used once to be sold for eight times its weight in silver. Tea, in various modes of preparation, is much valued as a medicine; and different parts of rare animals are included in the list, with the reputation of properties as multifarious and inconsistent as the pills of a London quack.

In some instances they show a whimsical preference to one substance over another, which apparently possesses exactly the same nature and qualities. From the *laurus camphora*, a large timber tree which grows plentifully in their own country, they obtain easily and cheaply vast quantities of camphire, which is sold as low as a few pence the pound. Instead of this, however, they use in medicine a species which is imported from Sumatra and Borneo, in very small fragments about the size of a pea, picked in a crystallized state from the interior of the *dryobalanops camphora*, and sold at Canton for a price which is equivalent to 4*l.* sterling the pound weight. As a drastic medicine, the *pa-tow* (croton tiglium) is used in a combination with rhubarb. Among the most effectual means for the alleviation or removal of local pain, they reckon the application of the moxa, or actual cautery. This moxa is prepared by bruising the stems of an artemisia, called *gae-tsaou*, in a mortar, and then selecting the most downy fibres. These, being set on fire upon the part affected, are said to consume rapidly without producing any severe pain. The fibre of the artemisia is also used by the Chinese as tinder for lighting their pipes, being previously steeped in a solution of nitre, and fired, either by means of a flint and steel, or a small burning-glass; which last expedient the mandarins

in the embassy sometimes displayed to us with much ostentation, as something that should astound our ignorance.

Sir William Temple, in his works,* has left a paper on the use of the moxa, proving that remedy to have effectually cured him of a fit of the gout. He met with it in Holland, while residing as minister at the Hague, where a friend told him, "it was a certain kind of moss that grew in the *East Indies;* that their way was, whenever anybody fell into a fit of the gout, to take a small quantity of it and form it into a figure broad at bottom as a twopence, and pointed at top; to set the bottom exactly upon the place where the violence of the pain was fixed; then with a small round perfumed match (made likewise in the East Indies) to give fire to the top of the moss; which, burning down by degrees, came at length to the skin and burned it till the moss was consumed to ashes." From this description, and the statement that the remedy came direct from Batavia, it is plain that the Dutch obtained it in their intercourse with China, either from Canton or Fokien.

A physician whom Dr. Abel saw at Canton was entirely destitute of anatomical knowledge. He appeared to be aware that there were such viscera as the heart, lungs, and liver, but had no notion of their real situation, or, like the "doctor against his will" in Molière, placed them on the wrong sides of the body. Still he appeared not to be ignorant through choice, as he eagerly examined some anatomical plates from the factory library, declaring that such delineations on a large scale would be a most valuable acquisition.† We must observe, how-

* Vol iii., p. 254.

† Dr. Abel observes of this person, that though ignorant of all rational principles of practice, he had arrived at some rules of high utility, distinguishing between local diseases which can

ever, that though they never either dissect or practice amputation, (except that of the head,*) and are consequently ignorant of the structure and functions of the vital organs, they have a tolerable acquaintance with *osteology*, or the knowledge of the skeleton.† The importance which they attach to the remains of their deceased relatives is such, that on a change of abode, or for some other reason, they often disinter the bones, and place them in a jar for removal. On an occasion of the kind, the writer of this once stood by an old man while he was taking out one by one, and with the utmost solemnity, the loose bones from a decayed coffin; and, as he placed them separately in the jar, he made an exact inventory on a slip of paper, giving to each its proper name, that none might be omitted. The scull was put in last, and crowned this pious work; nor was a bone omitted, even to the phalanges of the hands and feet.

The Chinese occasionally practise a species of forensic medicine, to ascertain from *external* indications the mode in which any person came by his death. A lad had one day been found dead in a house not far from the factories at Canton, and as it was suspected that violence had occasioned his death, the magistrate instituted his court near to the spot. The several parties implicated or suspected were brought before him and examined, some of them with torture. The body being extended upon boards, a quantity of mash, composed of some grain in a boiling hot state, was laid over it. After a time

be cured by mere topical applications and those to be acted on only through the medium of the constitution.

* The punishment of cutting into pieces, as the Europeans at Canton call it, is known to consist of a few mortal cuts and stabs, after tying the criminal to a post.

† To a certain extent they are phrenologists, and have some faith in the external indications of the scull. They look for the principal characteristics of a man in his forehead, and of a woman in the back part of the cranium.

this was removed, and from the appearance of the skin and muscles they appeared to form a judgment as to the cause of the individual's death. It is needless to remark in how very few cases this superficial mode of examination could be of any use in ascertaining the multiform ways in which life may be extinguished.

Some notable instances of the ignorance of Chinese physicians are recorded by the late Sir George Staunton,* from the experience of Dr. Gillan, when he was called in to prescribe for the chief minister Ho-choong-tang. A completely formed hernia had been mistaken by the native sangrados for what they called "an accumulation of noxious vapours," to get rid of which the puncture of the part had been recommended. Luckily for the patient, he had resisted this practice, being perhaps unwilling to subscribe to the maxim of the doctor in the play, "qu'il faut mourir selon les règles." Another instance is mentioned in the same work. One of Lord Macartney's suite, labouring under a dysentery on the road between Peking and Tartary, was induced in evil hour to consult a native physician. The practitioner, after dilating on the doctrine of the pulse, and delivering a discourse on hot and cold humours, pronounced that the patient laboured under the *latter*; and, by way of warming him, administered strong doses of pepper, cardamons, and ginger, taken in distilled spirit. The individual escaped alive with some difficulty.

When a physician has been unsuccessful, he retires with the common Chinese adage, "that there is medicine for sickness, but none for fate." The low state of the art may partly be explained by the small consideration in which the profession is held, and by there being no public schools of medicine, nor any way of acquiring their limited knowledge, ex-

* Embassy, vol. ii.

cept by engaging with some person already in practice. That they occasionally gain considerable reputation and profit seems clear from the success of a fashionable doctor at Canton, of whom there is some account in the Chinese Repository,* and who rose from the condition of a mere hawker of drugs to be the medical oracle of the neighbourhood. His house is opened early in the morning to patients who call, and these are ushered into his presence one by one. At a regular hour, he sallies out to see those who send for him to their houses, and receives what they choose to give him. He is a man of few words, and either will not, or cannot explain the operation of his prescriptions; but people are said very generally to get well under his care. An instance was known at Canton of an English gentleman of some attainments, who finding that his health did not improve in the hands of his own countrymen, actually sent for a Chinese doctor, and declared that he benefited by his drugs, which were principally simples. There is some sense, at least, in the following cure for opium-smoking, and it may be fairly supposed that the efficacy lies more in the rule for administering the remedy than in the remedy itself. The patient is instructed to diminish his quantity of opium daily, and, beginning with a little of the substitute, to increase that every day until the opium is left off altogether. Then gradually to diminish the substitute, until that also is altogether disused.

In Du Halde we find about one hundred pages devoted to the Chinese "doctrine of the pulse," which bears on the very face of it the plainest evidence of being a mere mass of solemn quackery, and is avowedly connected with that precious scheme of the five planets, the five viscera, elements, tastes, &c., already given at page 256. Their ignorance of the true secret of the circulation is proved by

* Vol. i., p. 343.

imagining that there is a distinct and different pulse in every part of the body. Nay, they pretend to distinguish three on one arm, the first immediately on the *metacarpus*, called "the inch," and two others higher up towards the elbow, called respectively the "bar" and the "cubit;" perhaps referring to the two bones of the forearm. These are supposed to be connected with the "five viscera" and the "five elements." In this manner they proceed to distinguish twenty-four different *kinds* of pulse, which, being multiplied by the *places* where they occur, make the whole number of indications too numerous to reckon up.

They do not even know the distinction between arteries and veins, and certainly not a syllable of the function of the lungs in oxygenizing the blood, and getting rid of its superfluous carbon. Of the existence of certain sympathies between the different viscera, and of derangement being communicated to one by the disorders of another, they might seem to have some glimmering, and to express it strangely by calling the heart "the husband," and the lungs "the wife," &c. Without the practice of dissection, it would be singular indeed if they *did* know much; and both law and prejudice put that out of the question. We may remember that, even in this country, it is but a very short period since dissection was legalized on any scale; before which a surgeon was punishable, at one and the same time, for not knowing his profession, and for trying to learn it in the only effectual manner.

The Chinese physiologists expressly call man a *Seaoutien-ty*, a "little universe, or microcosm," and they extend to this the same doctrine of the *Yin* and *Yang*, or of the dual principle which has been mentioned in our twelfth chapter, as originating the existence, as well as maintaining the order and harmony of the natural world. They suppose that on a due proportion between these, or between *strength* and

weakness, *heat* and *cold*, *dry* and *moist*, &c., consists the health of the human body; and that different degrees of excess or defect produce disease, and ultimately death. There is a great pretension to harmony and consistency throughout the whole system of physics, which perhaps might be called *beautiful*, were it only *true*, and based upon something better than empty speculation. If it is often unintelligible, or a mere arrangement of words without ideas, this renders it, to them, only the more mysterious and worthy of admiration, for "true no-meaning (as Pope says) puzzles more than wit."

Enough has been done for the Chinese at Canton, if open to conviction, to impress them with the value of the medical science of Europe. The smallpox formerly committed dreadful ravages among them. Their mode of inoculation was to place a little of the virus, taken from a former patient, dried and reduced to powder, on cotton wool, and to insert this in the nostril. It may be inferred, that as blindness is an extremely common occurrence, and a large number in that condition are deeply marked with smallpox, the inflammation caused by the above mode of inoculation occasioned the loss of sight in many cases. But both the smallpox, and that imperfect or injurious mode of guarding against its effects, were destined to yield to the benign influence of vaccination, which was introduced, and ultimately established, by the active and persevering humanity of Mr. Pearson, principal surgeon to the British factory. It finally obtained the sanction of the local government; and native vaccinators, who at first operated under the supervision of that gentleman, now practise on all classes.

From the periodical reports, it appears that, in one instance, the benefit which Mr. Pearson thus conferred upon the largest associated population in the world, met with singular obstacles in a particular quarter. After having extended to the province of

Keang-sy, adjoining Canton to the northeast, it was suddenly dropped there, being opposed by the jealousy of the Budhist priests, who, in that part of China, had a double interest in the *preservation* of the smallpox. In the first place, they were much employed in the business of inoculation after the Chinese method; and secondly, they were well paid for certain ministrations with their deities* to avert or mitigate the scourge. Thus it was that these worthies, who benefited by the harvest, always wished to leave a little for seed. The breaking out of the scarlet fever unfortunately afforded them plausible ground of crimination against a practice, which was said to retain the poison in the system, to appear at a future time in a still worse shape.

The general success, however, of this invaluable remedy is a singular exception to the usual reception which knowledge or improvements meet with in the celestial empire. As a summary of the latest reports of Mr. Pearson, it may be stated that the practice of vaccination has acquired great stability among the Chinese of Canton province, of every condition; that it is known to have been conveyed *again* to Keang-sy, as well as to other provinces; that it even reached Peking, but unfortunately was soon lost there; that its anti-variolous efficacy is universally known and confided in; and that its preservation has resulted from the well-adapted system pursued, and the agency of the Chinese vaccinators. The principal of these, under the instruction of Mr. Pearson, was a former purveyor to the East India Company at Canton. He was encouraged in his exertions by the favourable opinion of his countrymen, and by marks of distinction conferred on him by the higher functionaries of the local government. From all the evidence obtained, it appears that the practice

* They have one particular idol, whose name may be construed, "Our Lady of the Smallpox."

of vaccination in China, if it fails occasionally, though very unfrequently, in affording a perfect security against the occurrence of the disease, invariably mitigates the severity of smallpox.

Of the progress of the natives in chymistry, as allied to medicine, Mr. Pearson acquired a fuller knowledge than any other European; and as he has very kindly, at the requisition of the writer of this, furnished his own memoranda on the subject, the curious information contained in them is here given. He had long observed that the shops of the Chinese apothecaries were supplied with various preparations of quicksilver, and that they afforded as many resources for medical practice, derived from that mineral, as those of our own country; but to any inquiries respecting the chymical processes by which they were prepared, he could obtain only vague and incorrect answers; it appearing to be no part of the profession or duty of the venders to possess knowledge of that kind. Having found a person whose occupation it was to prepare some of them, and to dispose of them to the medicine shops, Mr. Pearson engaged him to go through the different steps of the processes in his presence, and the operator brought his materials with him. For the preparation of a muriate of quicksilver they were—

	Grains
Sulphate of iron	940
Sulphate of alumine . . .	920
Nitrate of potash (very impure) .	900
Sulphuret of quicksilver . .	120
Another sulphuret, uncertain (of a yellow colour and finely levigated)	660
Quicksilver	660
Muriate of soda	920
Sub-borate of soda	930

An apparatus and vessels were readily procured on the spot, his furnace being one of the portable

cooking stoves of baked clay in use among the Chinese; besides an unglazed earthenware dish, of the capacity of about a pound; one of a similar shape, and rather more than double that capacity, of which he had the bottom beaten out; a common flat porcelain plate: and a large earthenware vessel, with some water at the bottom. Having mixed all the ingredients, except the two sulphurets and the quicksilver, he put them into the unglazed earthenware dish. He then strewed the two sulphurets over the contents, and placed the dish upon the furnace, over a few thoroughly ignited charcoal embers. The whole (except the lump of nitre) being fused in about half an hour, he added the quicksilver, and increased the fire, though still the heat was very moderate. After an hour, and when the materials had fused together and blistered up, he removed the vessel, with a spongy mass adhering to it, from the fire, and inverted it so as to pour out a portion of the quicksilver, which he returned to the vessel, and placed it again on the fire. Upon removing it after ten minutes, and finding upon trial that no quicksilver escaped, he inverted it upon the plate, and heaped up common salt all round the sides of the dish, and also over its inverted bottom. Over this he inverted the other (larger) dish with its bottom beat out, so that its rims rested on the edges of the flat plate. Then taking another earthenware dish, he placed it in the large vessel, bottom upward in the water, so as to serve for a stand; and upon this he put the plate, with the under surface of which the water was now in contact, but not rising over its edges. He now heaped more salt upon the bottom of the dish, and filled the interstices, between the salt and the outer dish, with pieces of ignited charcoal. In half an hour he added more charcoal, and urged the fire by fanning; applying his ear from time to time in order to listen, he said, for a hissing and bubbling.

This he watched for, and announced its occurrence with the charlatanery of an alchymist.

He returned next day, bringing a standard specimen of the substance sought from such a process as he was conducting; and proceeding to remove the charcoal ashes and the salt, he lifted up the inverted dish. The product was collected on the plate, some of it white, some discoloured, and also some quicksilver not at all oxydized; that being removed, the whole muriate was collected, and found to weigh 240 grains. The product bore comparison with the standard preparation very ill, and he said that, in manufacturing the article for sale, he had no other resource on such occasions than a repetition of the process, until he succeeded better than in the present instance. He showed himself to be considerably disappointed by the result of this experiment, and requested to be allowed to repeat it with his own materials, except the nitrate of potash, which was supplied to him. He went through every step of the same process with accurate adherence; and in this instance the experiment succeeded, as from the plate, and those portions of the dish unoccupied by the mixture, two drachms of a white powder, mixed with fine needlelike crystals, were removed with a feather, and by scraping. This approached the standard pretty nearly, and appeared to be altogether as white and pure as any specimens Mr. Pearson had seen from their shops.

In the preparation of the red nitric oxyde of quicksilver, the furnace used by the native operator was the same as before, but his vessel was a cast-iron pan of a size proportioned to it, and of the description and shape which goes by the name of a tatch. Before putting the ingredients into it, he allowed this to become thoroughly hot by pieces of burning charcoal placed under it. His ingredients were now—

Sulphate of alumine,
Nitrate of potash,
Quicksilver—each 1,920 grains.

He fused the first by itself, and added to it the nitrate of potash, and then the quicksilver. His fire was now stronger than in the last process, and, after the ingredients had been exposed uncovered to its quick action during a few minutes, the operator inverted a large glazed earthenware bowl over them, of such diameter as to leave an inch of the edges of the pan beyond its rims. He heaped salt round the sides and over the bottom of the bowl, upon which he placed a brick. When nitrous acid vapours began to come through the salt, he appeared at first disposed to stop their egress by adding fresh salt; after which he paid no further attention to them. By the addition of thoroughly ignited pieces of charcoal, he kept up a considerable degree of heat under the tatch for upward of two hours, when, having filled the furnace with pieces of charcoal, he said it might be allowed to burn out, and the vessels to cool. Next morning, when the brick and salt were removed, the nitric oxyde of quicksilver was found closely adhering to and crusting the inside of, the bowl. When the whole was scraped off and collected, it weighed 1,440 grains.

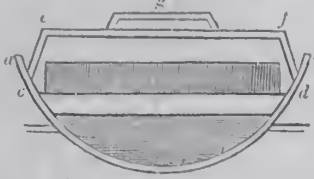
The process employed in procuring a sulphuric, as well as another, oxyde of quicksilver, Mr. Pearson likewise describes in detail. Of the existence of the mineral acids in an uncombined state he believes them to be wholly ignorant. He mentions another of their mercurial preparations, the only one which they seem ever to administer internally, and which he conceives to be a very general and useful instrument of their medical practice, answering to calomel in our's. Of the process used in preparing the same he could obtain no accurate account, as it comes only from the province of Fokien, in small boxes wrapped in a printed paper; it appears in fine flakes of a pearly-white colour. As the Chinese are perfectly acquainted with the mode of oxygenizing quicksilver by triture, it may be supposed that they

adopt that form also of administering it. The most prevalent mode, Mr. Pearson believes, is by triturating the mercury with fresh and juicy leaves into a pulp, and until all globules disappear. The leaf in which they wrap up betel for mastication is generally made use of, and, with the addition of some unimportant ingredients, a mass for pills is performed.

It appears, then, that the Chinese are possessed of a variety of active preparations of quicksilver, nearly similar to those which Europeans use; their processes being more cumbrous, unscientific, and uncertain as to the results than our's, and greatly more expensive. Mr. Pearson apprehends, too, that they apply them nearly to the same practical purposes as ourselves; but whether for good or evil must, on account of the state of their medical knowledge, depend more on the experience and good judgment of the individual practitioner, than is the case among us. With the disease in which the efficacy of mercury is most complete, they as invariably associate the remedial use of, and necessity for recourse to it, as Europeans can possibly do. Upon the whole, Mr. Pearson's inquiries afford a curious proof of similar results attained by the most different and distant nations, possessing very unequal scientific attainments; and they bear no unfavourable testimony to Chinese shrewdness and ingenuity, in the existing state of their knowledge.

Although unacquainted with the mechanical *force* to be derived from steam, the great *heat* of that agent under confinement is applied by them in the simplest manner in their daily cookery. Thus *a b* is the vertical section of a large cast-iron pan, which in shape is the segment of a sphere. This holds the water, in which anything may be boiled. Over the boiling water is placed a slight wooden frame, being an equilateral triangle, supported by its three points against the sides of the pan, at the height *c d*. On this triangle is laid a seive, containing rice

or other vegetables, which are cooked by means of the steam, whose escape is prevented by a wooden cover *e f*, resembling an inverted tub, with a handle to lift it by at *g*



They perfectly understand the process of distillation, by which they produce their ardent spirits, the best of which resemble whiskey. The grain first undergoes the vinous fermentation in water, which is assisted by the addition of a fermenting substance. In this state the liquor is clarified and used as wine. If the spirit be wanted, the vinous liquor then becomes subjected to the alembic. We may, among other matters, mention their manufacture of the sulphate of iron, as witnessed by Dr. Abel: "A quantity of hepatic iron pyrites, in small pieces, mixed with an equal quantity of coal in the same state, being placed together in a heap, the whole is covered with a coating of lime plaster. In a short time great action takes place in the mass, accompanied by the extrication of much heat and smoke, which is allowed to go on until it has spontaneously ceased. The heap is then broken up and put into water, which is boiled until considerably reduced in volume, and then evaporated in shallow vessels." Very pure crystals of sulphate are said to be thus produced.

In 1821, Dr. Morrison adopted the idea of establishing near his own house at Macao, with the co-operation of Mr. Livingstone, the assistant surgeon

to the British factory, a dispensary for the relief of Chinese patients; and (with a view to obtaining at the same time some knowledge of the native practice) he purchased about eight hundred volumes on their medicine and pharmacopœia, and engaged the attendance of a native doctor at his dispensary. Without applying for *a single subscription* from individuals, hundreds of Chinese were relieved of disease and suffering under various forms, and more than three hundred of these made very grateful acknowledgments for renovated health.* The liberal medical establishment of the East India Company in China being now broken up, the English surgeons subsist on reduced emoluments, and, being no longer able to distribute medicine gratis to strangers, are obliged to send in their apothecaries' bills. The time, besides, which might formerly be devoted to liberal inquiries into the state of medical knowledge in the country, must now be absorbed by the pressing calls of their business.

The account of the native practitioner, who attended at Dr. Morrison's dispensary under the observation of Mr. Livingstone, was favourable as to his intelligence and general character. To all those particular cases in which mercury is a specific, he conducted himself with some severity, and generally refused to prescribe for them. This branch of practice, he declared, was commonly declined by the regular members of the Chinese faculty, being in the hands of *barber surgeons*, who use externally a preparation of three ingredients, namely, mercury, arsenic, and what is supposed to be a sublimate of quicksilver in powder. The author of the *Pun-tsaou* or great work on materia medica, states it to be above a thousand years since mercury, which they call "water silver," (literally *hydrargyrum*,) became famous. One of its most legitimate uses at present is

* Chinese Gleaner vol. iii., p. 7

as a vermifuge, or anthelmintic; and it is also used in diseases of the skin arising from the presence of animalculæ.

In addition to the ancient use of mercury in medicine, the Chinese appear to have been acquainted with the sulphate of soda (known in Europe under the name of *Glauber's salt*) about twelve centuries ago. Its notoriety is said to have been occasioned by the following circumstance: the reigning emperor heard that there lived somewhere in his dominions a disciple of *Laou-tze*,* one of those alchymists who for so many centuries had been in search of the *elixir of immortality*—a pursuit which has in China produced effects similar to those resulting from the hunt after the philosopher's stone in Europe. Being of great age, the professor appeared to realize in his own person the virtues of his nostrums, and he was accordingly summoned to court and examined. The alchymist attributed his longevity to the use of the "bright powder of Heuen," as it was called after his own name, just in the way that Glauber's salt was named from its German discoverer. It is valued at present by the Chinese as a cleanser and putrifier of the system, in accordance with their doctrine of "hot and cold humours."

Proceed we now from medicine to another subject. In the science of numbers, and in geometry, the Chinese have, as usual, nothing to teach us; being, on the contrary, indebted for a good deal to Europe, as may be seen from the logarithmic tables and other works prepared for the emperor Kang-hy by the Jesuits. Their arithmetic, as well as their weights and measures, proceed universally on the decimal scale; and decimal fractions are their *vulgar* fractions, or those in common use. It is remarkable that the single exception to this consists in their *kin*, or marketing pound weight, which,

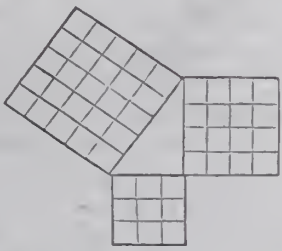
* Whose sex is described in the xivth chapter.

like ours, is divided into sixteen parts. It is most probable that both originated in the facilities afforded by the binary division into halves, quarters, eights, and sixteenths. The sexagesimal division of the great circle was early borrowed by the Chinese from the Arabians, and of course used by the missionaries in the construction of their trigonometrical map of the empire. No algebraic knowledge is to be found in China, while it is certain that the *Hindoo* attainments in algebra were much superior to their astronomical science, and bear, besides, all the features of originality, which the latter does not.

The Chinese numbers are *written* in words at length, that is, unlike the Arabic system of numeration, where the powers of the numbers increase or diminish decimally, according to position. This inconvenience is got over, in calculation, by the assistance of a little apparatus called a *suan-pan*, or "calculating dish," having balls of wood or ivory strung upon wires in separate columns, of which one column represents units, with a decimal increase and diminution to the left and right, as in our system of numeration. Each ball above the longitudinal division of the board represents *five;* and each ball below it stands for *one*. At Canton they sometimes write down the numbers in abbreviated marks, and place them like our Arabic figures, in numerical order; but still, in arithmetical operations, the above machine is always used, and seems never to have been superseded. Its chief disadvantage is, that no traces remain of the operation after it is concluded, which, in the event of error, necessitates the work being recommenced *de novo*.

The Chinese books contain a diagram, which in a manner *represent* the mathematical truth enunciated by the 47th proposition of the first book of Euclid. This, however, is not demonstrated mathematically, (which requires reference to preceding propositions in the same book,) but by construction

or measurement. In a right-angled triangle, whose sides are as 5, 4, 3, the squares are as 25, 16, and 9 ·



and it is only when the sides are in these *exact* proportions that such a clumsy sort of proof can be given of the proposition, that "the square of the hypothenuse equals the sum of the squares of the other two sides," or 25=16+9. Mr. Barrow has observed that the open and closed points connected by lines, and said by the Chinese to have been found on the back of the tortoise, are nothing but representations of the nine digits, placed in such a manner as to count fifteen every way, thus:

2	9	4
7	5	3
6	1	8

Such are the puerile matters that are contained in the ancient and original works of the Chinese Without geometry, it was impossible for them to have any correct notions of geography; and, but for their liberal and enlightened emperor Kâng-hy, who availed himself of the aid of the Jesuits, they

might even to this day have represented their country as the centre of a circle, studded round with the abodes of the rest of mankind. But they have learned to appreciate the maps of the several provinces, and of the whole empire, constructed for them more than a hundred years since by the Europeans at Peking, and copied by them servilely in most particulars, the chief defect being in the execution. The writer of this has a geographical work taken from wooden blocks, which is sufficiently correct for purposes of ordinary reference. Every province is separately laid down on the spherical projection, with lines of latitude and meridians of longitude; the former calculated, like ours, from the equator, but the longitude from Peking. Minute accuracy, however, is not at all observed: rivers are represented on a very disproportionate scale, conformably to the Chinese ideas of their importance, serving as they do for the principal high roads of the empire. Everything external to their own country, and Tartary, they seem to be quite indifferent about; and, with the exception of a rough map of the two terrestrial hemispheres, copied from one by the Jesuits, no work on general geography is ever met with.

The missionaries first recommended themselves to the favour of the emperor and his court, by amusing them with a variety of philosophical contrivances of an ingenious nature. In dioptrics and catoptrics, they exhibited the effects produced by various lenses; the artificial rainbows resulting from the transmission of the rays of light through prisms, with their subsequent reflection; the uses of the telescope and the microscope; and, what pleased the ladies of the palace more than anything, they contrived a *camera obscura*, by means of which every object passing outside was made visible on a flat table within the apartments. In hydrostatics and hydraulics, they constructed pumps, syphons,

and fountains, some of which were applied to purposes of use or ornament about the emperor's residence. In dialing, too, the Jesuits gave them lessons which they have not yet forgotten, as we often see in their shops a contrivance attached to their compass, with which the hour of the day is roughly ascertained, by the shadow of a string that serves as the gnomon of a dial.

But it was in astronomy that the greatest assistance was derived from European science and skill. When Père Verbiest arrived at Peking, he found an Arabian astronomer employed in the construction of the Imperial Almanac. This person was so ignorant of his business, that he had inserted an intercalary month in the current lunar year, when it should have consisted of only twelve lunations. This afforded Verbiest an occasion for proving the superiority of his own science, and having the calendar altered, though with some difficulty, the Chinese being sorely puzzled to know why they should be deprived of a whole month. The Jesuit proved the ignorance of the Arabian by challenging him to calculate, before hand, the length of the shadow of a gnomon on a particular day at noon. The professor failed altogether, and was succeeded in his office by the missionary, whose calculation proved nicely accurate; and thus the Europeans became established at the head of the Astronomical Board, from which they were dismissed only a few years since. The instruments constructed under the direction of Verbiest, for the imperial observatory at Peking, have been described by Le Compte. They consisted of an armillary sphere, an equinoctial sphere, a celestial globe, an azimuth horizon, and a quadrant and sextant.*

* The work, in one hundred Chinese volumes, composed and translated by Matthew Ricci and other missionaries, by desire of Hang-hy, is a remarkable production. It is executed in the best style of native books, and being now very scarce and ex

The simple fact, that a people so vain and self-sufficient as the Chinese should have adopted the science of foreigners, and raised the professors of that science to considerable dignities—that they should have deviated, on a point of such consequence, from their established prejudices and maxims—sufficiently proves that they had little science of their own. "It is true, that Confucius recorded thirty-six eclipses of the sun, the greater number of which have been verified by the calculations of European astronomers; but, as has been very truly observed, the *recording* an eclipse may prove the authenticity of historical annals, while at the same time it proves nothing as to the existence of astronomical science. As far as related to the mere *observation* of the sky, the Chinese have, from the earliest periods, been very particular and assiduous. The remark of Du Halde, that 'all these observations are not a little serviceable in ascertaining their chronology,' is very true; but they by no means prove (what he appears sometimes desirous to establish) that the Chinese were astronomers."*

We read, indeed, in their history, that the blunders of some of their pretended philosophers were ingeniously turned into an occasion of flattering the sovereign. In the time of Soong, a predicted eclipse having failed of accomplishment, they congratulated the emperor that the heavens had dispensed with this omen of ill luck in his favour. The very superstition argues an ignorance of the real causes of

pensive, cannot be procured under sixty or eighty Spanish dollars, which is quite a *fancy price* for a Chinese work. It treats of spherical trigonometry, geometry, astronomy, and music, and contains also tables of logarithms, which were merely turned into native figures, and not calculated by the missionaries. The diagrams in geometry are accurately and neatly cut, and the whole is a very respectable specimen of printing, worthy of the emperor's patronage. The title means in English, "The profound sources of numbers—by imperial authority."

* Phil. Trans. 1823. *On the Chinese year.*

eclipses; but, on this point, it is possible that the government saw the advantage of wielding the mysteries of astronomy and astrology as an engine of power over the ignorance of the people. It has, therefore, made a monopoly of the subject, and declared it death to publish a counterfeit or imitation of the Imperial Almanac. The extravagances of the populace, during the obscuration caused by an eclipse, are countenanced by the government. Though the emperor either does or ought to know better, he and his court go through sundry ceremonies on those occasions; and he affects sometimes to consider the eclipse as a warning to him, for something wrong in the administration.

But the most alarming prodigy of all is a comet, and this superstition they have had in common with many other nations. According to their shape and appearance, comets are called by the Chinese *broom stars*, *hairy stars*, and *tail stars*, and they are said to point the tail towards the region of whose ruin they are the presage. One of these appeared in May, 1820, and was observed by Mr. Reeves at Macao, on the 5th of that month, in the body of Centaur; its position being such as to be cut by two straight lines, one of them drawn through α and β, or the foot and easternmost arm of the cross, and produced N.E., the other through ε and β, or the western foot of Centaur. After the first observation, it became more visible by degrees, and then slowly disappeared towards the northeast. The Chinese affect to draw presages from the appearance of comets, and here they bring into play their foolish theory of the *five* colours.* If the appearance be red, particular consequences are to follow; if dark, they expect the overthrow of regular government, and the success of rebellions, &c.

A comparison between the ancient systems of

* See p. 256.

Chinese and of Hindoo astronomy is rendered some what perplexing by the fact, that, while there are some points of resemblance, there are others in which they essentially differ: both of them have twenty-eight lunar mansions, and a cycle of sixty years; but a careful observation detects some important distinctions; the Hindoo cycle is a cycle of Jupiter, while that of the Chinese is a solar cycle; and the twenty-eight constellations of the Hindoos are nearly all of them equal divisions of the great circle, consisting of about 13° each, while the Chinese constellations are extremely unequal, varying from 30° to less than 1°. The author's father, in conjunction with Sir William Jones, and MM. Colebrooke and Bentley, proved that the Hindoo astronomy did not go farther than the calculations of eclipses and some other changes, with the rules and tables for performing the same. Besides their lunar zodiac of twenty-eight mansions, the Hindoos (unlike the Chinese) have the solar, including twelve signs perfectly identical with our's, and demonstrating in that respect a common origin. As we know from Herodotus that the Egyptians had a week of seven days, so it is remarkable that the Hindoos had anciently the same, the planetary names being given to the days exactly in the same order as among us in Europe, but Friday being the first. The Chinese reckon *five* planets, to the exclusion of the sun and moon; but they give the name of one of their twenty-eight lunar mansions, successively, to each day of the year in a perpetual rotation, without regard to the moon's changes; so that the same four out of the twenty-eight invariably fall on our Sundays, and constitute, as it were, perpetual *Sunday letters*. A native Chinese first remarked this odd fact to the author, and on examination it proved perfectly correct.

The Hindoos divide the ecliptic into 360 degrees; and, being the reputed inventors of decimal arith-

metic, the singularity has been remarked of their using sexagesimal fractions in astronomy. It seems probable (as already observed) that the Chinese borrowed this division of the great circle from the Arabians. One coincidence with the Hindoos may be noticed. Sir William Jones remarks that, in their nuptial ceremonies, they had a constellation of *three stars*, called *abhijit*, for some astrological purpose: the Chinese ancient book of songs associates *three stars* with marriage, in this line of an epithalamium, —"The three stars shine on the gate." The astronomical works of the Hindoos, like those of the ancient Chinese, make no mention of observations, nor even of an instrument. According to the conclusions of Delambre, the Hindoo knowledge of astronomy was greatly inferior to that of the Greeks; and it has been argued by Laplace, in opposition to the previous opinion of Bailly, that the Indian astronomy is not of the highest antiquity, but must have been imperfectly borrowed from the Greeks.

There can be no doubt of the instruments, mentioned by Du Halde as found by the Jesuits on their first entrance into China, having been constructed by Arabians. De Pauw supposes that they were made at Balk in Bactriana, and passed into China during the Mongol government. The writer of this, however, observed in an old Chinese encyclopædia, that the height of the north pole was stated as being 36° above the horizon; and it appears from Du Halde that the instruments in question were also calculated for 36°. Now, as the elevation of the pole at any particular place is exactly the latitude of that place, it seems reasonable to conclude that those instruments were constructed when the Chinese observatory was south of Peking, and probably in Honân, a province in which the capital once stood. They would, at least, be useless in the north. The observation of Du Halde, that "the uses of the instruments were written in Chinese characters, with

the names of the twenty-eight constellations," is no evidence against their construction by the Arabians, though it *is* against their transportation from Balk. The guns, which were cast for the Chinese by the Romish priests, were all inscribed with the characters of the country; and the ungrateful vanity of that people has invariably led them, after borrowing anything from Europeans, to conceal the debt as much as possible. When Mr. Pearson made them his invaluable present of the vaccine inoculation, it was accompanied by a small pamphlet in Chinese, (written by Sir George Staunton,) containing some necessary directions for the use of the virus, and stating the discovery to have been English. An edition of this was very soon after published, in which not one word was retained as to its origin, nor any trace by which it could be known that the discovery of vaccination was otherwise than Chinese.

Their civil year is lunar, consisting of twelve months of twenty-nine and thirty days alternately, with the triennial intercalation of a thirteenth month; or, to speak more exactly, with the addition of a thirteenth month to *seven* years out of *nineteen*. They probably at first adopted the sol-lunar cycle of nineteen years, the same with the metonic cycle of the Greeks, the years of which were marked with the *golden number*, and seven of them (as with the Chinese) consisted of thirteen lunations. But the returning period of even *this* cycle being attended with a small error, their cycle of *sixty years* was at length adopted by the Chinese, comprising twenty-two intercalary moons. This answered the double purpose of regulating the sol-lunar year, and constituting a chronological era, with which they pretend to reckon back more than 2,000 years B.C. The era, however, may have been antedated, for the sake of an assumed antiquity.

At the same time, it is observed by Dugald Stew-

art,* that a cycle being commonly deducible from observations of physical events which are obvious to the senses, the most celebrated astronomical cycles are of a very remote antiquity, and were probably discovered at a period when the study of astronomy consisted merely in accumulating and recording the most striking appearances of the heavens. We have before remarked, that the Chinese have always been very attentive to the celestial phenomena, and patient observers of times and tides. They appear very early to have divined that the moon had the principal share in causing the flux and reflux of the sea; but they left the sun out of the question altogether. M. Klaproth remarked, that in an encyclopædia, written before the close of the ninth century, it is said that "the moon, being the purest principle of water, influences the tides." Another writer observes, in the twelfth century, that "the cause of the rising and falling of the sea consists in the proximity of the moon; for the waters go and come according to the period of the day and the position of the moon, which they follow."

No very certain reason can be given why the Chinese fixed upon the 15th degree of Aquarius as a point for regulating the commencement of their lunar year: but they have an annual festival† at the recurrence of that period, which bears some resemblance to the annual procession of the bull Apis among the Egyptians; and both ceremonies appear to have been connected with the business of husbandry, and with the opening promise of the year. It may possibly be the case, that the 15th of Aquarius has a reference among the Chinese to the position of the winter *solstitial colure* at a remote period. The winter solstice is at present observed as a festival; but whether or not that proves its having once been the period of their civil year's com-

* Philosophy, p. 436. † See vol. i., p. 285.

mencement cannot easily be decided. In an astronomical sense, they may be said to have a solar year as well as a lunar, and the winter solstice marks its annual limit. This solar year is divided into twenty-four periods of fifteen days each on an average. The Imperial Almanac, published annually at Peking, with the seal of the Astronomical Board on the cover, is filled with much of the nonsense of judicial astrology. Mr. Barrow was informed by one of the European astronomers at the emperor's court, that "the calculation of eclipses, the times of new and full moon, the rising and setting of the sun were intrusted to him and his colleagues; but the astrological part was managed by a committee of the Chinese members." This same person confessed that he was not very well qualified for his task, and expressed much gratitude on being presented with some copies of the Nautical Ephemeris, calculated for several years in advance.

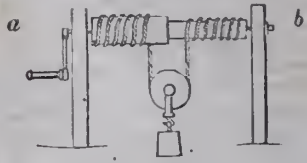
The Chinese almanac, like many others of the kind in Europe, contains predictions and advice for every day in the year, and presents the same spectacle of the abuse of a little mystical learning to impose on the ignorant majority of mankind. It even gives directions as to the most lucky days for going out, or for staying at home, for shaving the head after the Tartar fashion, changing an abode, executing an agreement, or burying the dead. With this are mixed up, in the same page, a number of useful observations concerning natural phenomena pertaining to the season, though these remarks are interlarded with a number of vulgar errors as to the transformations of animals. In their first moon, which is about our February, the ice is said to melt, the wild fowl to fly northward, and the foliage of trees and plants to be renewed: in the second, the peach trees blossom, swallows return, and there is much thunder and lightning: in the sixth, the weather grows hot, and the period of heavy rains comes on: in the

ninth, wild fowl return to the south, the chrysanthemum flowers, trees turn yellow, and shed their foliage: in the twelfth, lakes and rivers are covered with ice, and the ground is frozen.* This of course relates to the latitude of Peking, nearly 40° north.

In the science of *mechanics* and *machinery*, the Chinese, without possessing any theoretical rules, practically apply all the mechanical powers, except the *screw*, with considerable effect. The graduation of their common steelyard must have acquainted them with the conditions of equilibrium in that class of lever, or the relations between the long and short arm, and the power and weight. They use it constantly for weighing, not only the commonest articles, but the most valuable, as gold and silver. The pully is applied on board their vessels, but always with a single sheave, and apparently as much for the purpose of giving a particular lead to the ropes, as with a view to the mechanical advantage gained by it. The application of the tooth and pinion is exemplified in the representation of a rice mill, moved by water, at page 37 of Barrow's Travels. They seem to understand, in practice at least, that power and velocity vary inversely in machinery; as, for instance, that power is gained, or time, according as the moving force is applied either to the circumference, or the axis of a wheel.

It is remarkable that they should seem always to have possessed that particular application of the principle of the wheel and axle, by which the greatest power is attained within the least space; and, at the same time, with the greatest simplicity, as well as strength of machinery. The cylinder *a b* consists of two parts of unequal diameter, with a rope coiled round both parts in the same direction, the weight to be moved being suspended by a pulley in the mid-

* With these useful notices are mixed up very ignorant observations, countenancing the grossest superstitions of the people



dle. Every turn of the cylinder raises a portion of the rope equal to the circumference of the thicker part, but at the same time lets down a portion equal to the circumference of the thinner; and, as the weight is suspended by a pulley, it rises at each turn through a space equal to only half the difference between the span of the thicker and thinner parts of the cylinder. The action of the machine, therefore, is very slow; but the mechanical advantage is great in proportion, or, in other words, "power is gained at the expense of velocity," according to an invariable law of mechanics.

The overshot water wheel is used commonly in corn mills, wherever the nature of the country affords streams available for the purpose. In cottages a domestic mill was frequently seen by our embassies, composed of two circular stones put in motion by a single man or boy, or sometimes an ass or mule, the power being applied at the end of a lever fixed in the uppermost stone.

The juice of the sugarcane is expressed in mills similar to those used in India, according to the description of Dr. Buchanan. It consists of two upright cylinders, which are put in motion by a buffalo yoked to a beam passing from the top of one cylinder. The mill is fed by introducing the cane between the rollers, by which it is crushed and carried over to the other side. The expressed juice runs through a channel below into a large reservoir,

Rice Mill

whence it is transferred to boilers, and, being there sufficiently inspissated, is sent in tubs to the refiners In the above instance the mechanism might be evidently economized and improved by causing the cylinder, which communicates motion, to turn *two* others instead of only *one;* this is said to be the practice in our West Indian colonies.

The Chinese excel in their contrivances for raising water in the irrigation of their lands, and it is probable that these inventions are nearly as old as their husbandry itself. One of them is an ingenius species of chain pump, which we give here as it is well described and figured in Staunton's Embassy.* The pump consists, in the first place, of a hollow trough or trunk, of a square make. "Flat and square pieces of wood, corresponding exactly to the dimensions of the cavity of the trunk, are fixed to a (jointed) chain, which turns over a roller or small wheel placed at each extremity of the trunk. The square pieces of wood fixed to the chain move with it round the rollers, and lift up a volume of water equal to the dimensions of the hollow trunk. The power used in working this machine is applicable in three different ways: if the machine be intended to lift a great quantity of water, several sets of wooden arms are made to project from various parts of the lengthened axis of the roller, over which the chain and lifters turn. These arms are shaped like the letter T, and made round and smooth for the foot to rest upon. The axis turns upon two upright pieces of wood, kept steady by a pole stretched across them. The machine being fixed, men treading upon the projecting arms of the axis, and supporting themselves by the beam across the uprights, communicate a rotary motion to the chain, the lifters attached to which draw up a constant and copi-

* Vol. ii., p. 480.

ous stream of water.* This manner of working the chain pump is illustrated in the annexed cut, and is

Chain Pump from Staunton.

applied principally to raising water to small heights from rivers or canals; frequently to pumping out the holds of their merchant vessels.

* These lifters go up *through the inside* of the trough, and come down again above it, in a reversed position.

"Another method for working this machine," continues Staunton, "is by yoking a buffalo or other animal to a large horizontal wheel, connected by cogs with the axis of the rollers over which the lifters or boards turn. This mode was observed by the travellers only at Chusan. A small machine of this kind (in the third place) is worked merely by the hand, with the assistance of a trundle and simple crank, such as are applied to a common grindstone, fixed to one end of the axis of the chain pump. This last method is general throughout the empire. Every labourer is in possession of such a portable machine —an implement to him not less useful (in rice cultivation) than a spade to a European peasant. The making of those machines gives employment to great numbers of artificers."

But by far the most ingenious and useful contrivance for irrigating lands, is that which our embassies met with on the river which flows down with a rapid stream, from the ridge of mountains bounding the Canton province on the north, towards the Poyang lake. The velocity of the current has worn away the banks, which consist of a loose soil, to the depth in some places of thirty feet and more. Here the machine already described becomes altogether unavailable, as the weight and pressure of a column of water of that height, and the friction of the length of chain required, put it out of the question. But Chinese ingenuity has converted the strength of the stream into a means of overcoming the very difficulties which it originally occasioned; and one is at a loss which most to admire, the cleverness and efficiency, or the cheapness and simplicity of the contrivance. The wheel, which is turned by the stream, varies from twenty to thirty feet or more in height, according to the elevation of the bank; and, when once erected, a constant supply of water is poured by it into a trough on the summit of the river's side, and conducted in channels to all

parts of the sugar plantations which there chiefly occupy the lands.

The props of the wheel are of timber, and the axis is a cylinder of the same material; but every other portion of the machine exhibits some modification or other of the bamboo, even to the fastenings and bindings, for not a single nail or piece of metal enters into its composition. The wheel consists of two rims of unequal diamater, of which the one next the bank is rather the least. "This double wheel," observes Staunton, "is connected with the axis by sixteen or eighteen spokes of bamboo, obliquely inserted near each extremity of the axis, and crossing each other at about two thirds of their length. They are there strengthened by a concentric circle, and fastened afterward to the rims; the spokes inserted in the interior extremity of the axis, (or that next to the bank,) reaching the outer rim, and those proceeding from the exterior extremity of the same axis reaching the inner and smaller rim. Between the rims and the crossings of the spokes is woven a kind of close basketwork, serving as ladle boards," which are acted upon by the current of the stream, and turn the wheel round.

The whole diameter of the wheel being something greater than the height of the bank, about sixteen or twenty hollow bamboos, closed at one end, are fastened to the circumference to act as buckets. These, however, are not loosely suspended, but firmly attached with their open mouths towards the inner or smaller rim of the wheel, at such an inclination, that when dipping below the water their mouths are slightly raised from the horizontal position; as they rise through the air their position approaches the upright sufficiently near to keep a considerable portion of the contents within them; but when they have reached the summit of the revolution, the mouths become enough depressed to pour the water into a large trough placed on a level with the bank

to receive it. The impulse of the stream on the ladle boards at the circumference of the wheel, with a radius of about fifteen feet, is sufficient to overcome the resistance arising from the difference of weight between the ascending and descending, or loaded and unloaded sides of the wheel. This impulse is increased, if necessary, at the particular spot where each wheel is erected, by damming the stream, and even raising the level of the water where it turns the wheel. The circumstance occasioned some obstacles to our progress up the stream towards the Mei-ling pass, as the water near such places rolled with the rapidity of a sluice. When the supply of water is not required over the adjoining fields, the trough is merely turned aside or removed, and the wheel continues its stately motion, the water from the tubes pouring back again down its sides. These wheels extend on the river Kan-keang, from the neighbourhood of the pass to a considerable distance down its stream towards the lake, and they were so numerous that we never saw less than thirty in a day. It is calculated that one of them will raise upward of three hundred tons of water in less than four-and-twenty hours. Viewed merely in regard to their object, the Persian wheel, and the machines used for raising water in the Tyrol, bear some resemblance to the one just described, but, as observed by Staunton, "they are vastly more expensive, less simple in construction, as well as less ingenious in contrivance."

It remains, under the head of this chapter, to say a word regarding the rules and principles which guide the Chinese in their *architecture*. Mr. Barrow has, with every appearance of probability, derived the shape of their roofs from the original use of the tent in their primitive pastoral state. Whatever the purpose to which a Chinese building may be destined, its roof invariably represents something of the catenary curve, which a rope assumes when sus-

pended between two points, and which therefore enters into the general contour of a tent, or a tent-like edifice. Owing to the same derivation, there is in the appearance of Chinese edifices a want of durable solidity, and the use of wooden columns in lieu of stone adds to the defect. These columns are commonly thin in proportion to their height. As we refer the origin of the stone pillars in European architecture to the trunks of large trees, tapering in proportion as they rise from the ground, so the Chinese pillars may be traced to the original use of the bamboo, which in its slender proportions, and nearly uniform diameter throughout the whole length, as similates to their columns at present.

The ornamental and honorary gateways (sometimes improperly termed triumphal arches) in the middle of Chinese streets, are of a similar construction. Their beauty arises wholly from the painting and gilding, and not from the proportions, which are weak and flimsy. The roof or summit, and what may be called the entablature, overweigh altogether the long and slender pillars beneath.* Every considerable house, as well as every temple, has a gateway before it constructed on the same general principles, and there is a high and broad passage through the centre, with a smaller one on either side. The same circumstances that may be

* In Alexander's prints to our first embassy there is a sketch of one of these. The emperor occasionally orders a *pae-low* to be erected at the public expense, to transmit to posterity the meritorious name of some just magistrate, some officer who has been killed in fight, or even of some individual among the people who may have been distinguished by his own virtues or talents, or those of his progeny. These monumental gateways are generally constructed of stone or marble, but sometimes of wood. The height is often thirty feet or more. Under a projecting roof highly ornamented, and on a species of frieze above the four pillars, is always an inscription setting forth the occasion of the edifice being erected, and the names and titles of the individual whom it commemorates.

ranked as drawbacks in general to Chinese architecture, fit it, at the same time, peculiarly to uses where only lightness is required. The ornamental pavilions in their gardens, often situated in the midst of sheets of water, and approached by bridges, are not altogether inelegant structures; affording at the same time a cool retreat in summer evenings.

Of the more solid architecture of the Chinese, something has already been said in describing their city walls, and the great national barrier towards Tartary. They occasionally build detached towers or castles, to command important points, as that described in Lord Macartney's embassy, at the confluence of the canal with the Peking river. These partake exactly of the structure of the Great Wall, being built of brick on a foundation of stone, with a height of from thirty-five to forty feet. The entrance is an archway in the side of the tower, at some height from the ground, so as to be accessible only by a ladder or steps. Of their more considerable forts, by far the best specimens in the whole empire are those four or five, built at an enormous expense, at the mouth of the Canton river. In forcing the passage by these batteries in September, 1834, we found that a few rounds of thirty-two pound shot from his majesty's ships *Imogene* and *Andromache* beat in a large portion of the castellated summit of the stone wall upon the garrison, and likewise knocked several of the lower ports or em brasures into one ; but the lowest portion, or foun dation, of the walls was of such immense solidity, that some hours of battering would be required to demolish them, and the only effect we could perceive through our glasses was the scaling off of large masses from the face of the stonework, wherever the shot had struck.

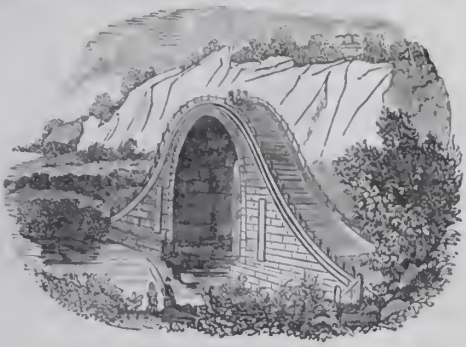
Of Chinese bridges, some have been very much exaggerated in the accounts of Du Halde and the missionaries, as appears from the later report con-

cerning the bridge at Foo-chow-foo, visited during the unsuccessful commercial voyage of the ship *Amherst*, in 1832. This same bridge, which proved a very poor structure after all, had been extolled by the Jesuits as something quite extraordinary. A bridge of ninety-one arches, being in fact a very long causeway, was passed by Lord Macartney between Soo-chow and Hang-chow, and near the lake called Taehoo. The highest arch, however, was supposed to be between twenty and thirty feet in height, and the whole length of the causeway half a mile. It was thrown across an arm of the lake on the eastern side of the canal. The late Sir George Staunton observed a bridge between Peking and Tartary, built across a river, which was subject to being swelled by mountain floods. This was erected upon caissons of wattles filled with stones. It appeared to have been built with expedition, and at small cost, where the most solid bridge would be endangered by inundations. The caissons were fixed by large perpendicular spars, and over the whole were laid planks, hurdles, and gravel.* It was only in Keang-nan that solid bridges were observed to be thrown over the canal, being constructed of coarse gray marble, or a reddish granite. Some of the arches were semicircular, others the tranverse section of an ellipse, and others again approached the shape of a horseshoe, or Greek Ω, the space being widest at the top.† In the ornamental bridges that adorn gardens and pleasure grounds, the arch is often of height sufficient to admit a boat under sail, and the bridge is ascended by steps.

All the stones of a Chinese arch are commonly wedge shaped, their sides forming radii which converge towards the centre of the curve. It is observ-

* Vol. ii, p. 177.

† The construction of a singular arch is described by Barrow Travels in China, p. 338.



Bridge for foot passengers.

able, that according to the opinion of Captain Parish, who surveyed and made plans of a portion of the Great Wall, no masonry could be superior to it. The arched and vaulted work was considered by him as exceedingly well turned. The Chinese, therefore, must have understood the construction and properties of the arch long before the Greeks and Romans, whose original and most ancient edifices consisted of columns, connected by straight architraves, of bulk sufficient to support the incumbent pressure of solid masonry.

CHAPTER XIX.

NATURAL HISTORY AND PRODUCTIONS.

Chinese Classification.—Result of their peculiar Language.—European Researches in China.—Zoology.—Mammalia.—Birds.—Reptiles.—Fishes.—Insects.—Botany.—Tea Plant. Timber Trees.—Uses of the Bamboo.—Dwarf Trees.—Fruits. Flowers.—Geological features.—Chalky strata nearly unknown.—Abundance of Coal.—Unstratified Rocks and older strata.—No active Volcanoes.—Minerals and Metals.

After a curious analysis of the great Chinese work on materia medica, which, although its name *Pun-tsaou* might literally imply that it was merely an *herbal* or history of plants, is in fact a classification of the chief productions of nature in the animal, vegetable, and mineral kingdoms, M. Rémusat comes to the following conclusion: "I think that we may infer that natural history has engaged the attention of the Chinese from the remotest antiquity, and that it became in consequence an object of pursuit among neighbouring nations,* which caused it to make some progress. The mode of writing employed in those countries leading the people who used it to establish *genera* and *orders*, furnished them with the elements of an excellent nomenclature, and put them in the way of classification. . . . All that could be learned from mere superficial inspection they have observed and recorded: all that demanded reflection or delicate research they have remained ignorant of or misapprehended. Superficial, however, as are the ideas they have collected, they constitute a scientific whole,

* Using the same written characters; as Japan and Cochin China.

which derives some value from the method to which it has been subjected. We conclude with a remark which is not destitute of interest to science itself: it is, that the Chinese and Japanese descriptions, when accompanied by the figures they refer to, may, with all their imperfections, enable us to distinguish the species we do from those we do not possess, augment our knowledge of facts, diffuse some light upon the distributions of the natural objects of the ancient world, and consequently may be consulted with advantage, even by *naturalists*, so long as circumstances shall continue to interdict European philosophers from countries so abundant in objects of natural history, and hitherto so little explored." In the fifteenth chapter* allusion was made to the advantageous hints which the constitution of their written character had, from the earliest ages, afforded to the Chinese for a systematic nomenclature, and a rational classification of natural objects into certain genera or families, according to the most striking and obvious analogies that existed among them. The two hundred and fourteen roots, under which the whole language is arranged in Chinese dictionaries, include about one hundred and sixty which serve at once (with the aid of other characters) as *component parts* in the written designations of all known objects in the animal, vegetable, and mineral kingdom, and as *heads* under which they have been classed. "From this simple arrangement," observes M. Rémusat, "the very ideas appear which regulated the formation of the compound signs; which ideas frequently coincide with such as intelligent naturalists might acknowledge and adopt as a basis for their arrangements. This may be observed on a glance at even their modern dictionaries, although the written language of China has undergone alterations of all kinds, and

* Page 142.

admitted many irregularities, which have affected the nomenclature of natural objects, as well as other parts of the language. In turning over the leaves of the commonest of these works, we easily recognise genuine natural families, imperfect, no doubt, and founded upon inaccurate views, imperfect observation, and an unphilosophical analysis; but discovering almost always a judicious design, with sound and sometimes ingenious conclusions."

Of the thirty roots, or radical characters, which constitute the genera or families above alluded to, *fourteen* include the animal kingdom. The *mammalia* are comprised under nine of these, viz., three families of *carnivora*, one of *rodentia*, and three of *ruminantia*, as oxen, sheep, deer; while the horse and swine are the types of two other families. In the details of the above arrangement there has been (as might be expected) much confusion and want of discrimination, in classing together animals between whom there was no real analogy, as well as separating others that were nearly allied: the ape and monkey tribes, for instance, are classed with the dogs; and numerous other examples might be adduced of the same kind. Birds, one of the most numerous classes of animals in China, are all comprised in *one family*. Then come the tortoise and frog tribes under *two heads*. Fishes constitute *one family*, and improperly include the cetaceous and saurian tribes, as well as lobsters, crabs, and some of the molluscæ. The *fourteenth* family of animals, in the Chinese dictionary system, consists of insects.

This may serve to convey some idea of the notions which the Chinese have of classification, and show at the same time in what they have failed. Their vegetable kingdom is divided into eleven principal families. The first comprises all herbaceous plants, which have a common type, and are very numerous. The second family has *wood* for its

radical character, and includes all trees, as well as plants with a woody stem: the bamboo, on account of its importance in use, and the great number of its varieties, stands at the head of the fifth class, and includes under it all reedy plants. No less than *four* separate radical characters serve as the heads under which the corn plants and esculent grasses have been arranged, and it follows of course that many repetitions and superfluous distinctions have taken place. The four together should have formed one natural family. The eighth family consists of leguminous plants, and has the bean for its type: the ninth comprises the cucurbitaceous, or gourd tribes: and under the tenth are included only about a dozen species and varieties of the alliaceous plants, as garlic, onions, and leeks. The importance attached to some of the smaller divisions, no doubt arose from their having been principal articles of food from the first. The eleventh and last family consists of plants analogous to the hemp, which, from its consequence, has, from the earliest times, been designated by a simple and radical character.

The mineral kingdom has been classed by the Chinese lexicographers under five radical characters. The first family consists of gems, of which the famous *yu*, or jade, is the type: to these have been improperly added all factitious stones, with glass, amber, &c. The four remaining families are distinguished into stones, earths, salts, and metals. "It must be remembered," observes M. Rémusat, very correctly, of the system, "that this was not a methodical or systematic arrangement contrived by naturalists, in order to classify the objects they wished to describe; but a mere distribution of written signs, brought together according to their orthography, and classed by the makers of dictionaries, solely with a view to facilitating and expediting the search for them. It cannot have escaped observation, that in this composition of signs there are certain scientific ideas whence

this remarkable classification arises, as it were spontaneously; and it may be asserted that there exists no other language in the world, the words of which taken intrinsically, and quite independently of definition or accessary explanation, could afford even to the vulgar such just notions of the natural affinities of things. This results from the figurative nature of the characters, which has not been adequately appreciated; and we ought, perhaps, to give some weight to this circumstance, in the speculating comparisons we are often so fond of instituting between writing which is adapted to represent speech, and that which is immediately directed to the painting of ideas."* M. Rémusat proceeds to detail the classification of natural history in the great Chinese work on materia medica and therapeutics; but as this is a subject much less curious and interesting, and would besides exceed our limits, it must be omitted.

We may now proceed to a general consideration of such of the principal productions of China in the animal, vegetable, and mineral kingdoms, as have come under the notice and knowledge of Europeans, observing that, in a country whose interior is so little accessible to us, there must be a great deal that remains to be known and described. The animals, as well as vegetables, of China belong almost exclusively to the temperate zone; for the low average of the thermometer (whose annual mean as far south as Canton is little above 70°) and the cold winters are unfriendly to the existence of numerous tropical tribes that are found in corresponding latitudes of India. There is no subject connected with China, we must premise, on which Europe is less indebted to the Romish missionaries than natural history.

* See Paper on "the state of the Natural Sciences among the people of Eastern Asia," as given in the Asiatic Journal, vol. ix., p. 89.

The Jesuits, to whom was intrusted the charge of surveying the country and constructing a map of it, performed their peculiar task admirably; but they lost an opportunity, which may perhaps never again occur, for investigating and describing the natural features of the empire. The studies of zoology, botany, and mineralogy, had certainly not, in their time, attained the scientific advancement which they have since reached; but there is a peculiar poverty and indistinctness about the missionary notices of such objects as they met with in the several departments of the three kingdoms.

The first European naturalist by profession that seems to have visited the celestial empire was Peter Osbeck,* who went to Canton in 1750, as chaplain to a Swedish East Indiaman, and recorded such discoveries as he could make within the limited range open to him at that port. He had the advantage of having been a pupil of the great Linnæus, and was enabled by circumstances to extend his researches to a considerable distance about the city, with little molestation. As he collected and described many plants from the vicinity of Canton and Whampoa, the remembrance of his zeal and success was perpetuated by Linnæus in the *Osbeckia Chinensis*, and an assistant named Toreen was complimented with the *Torenia Asiatica*. It is remarkable that these were the only persons who, unaided by patronage or the assistance of their governments, did anything material towards the elucidation of Chinese natural history up to the end of the last century. The situation of Europeans, at the very best, is so uninviting, or rather so miserable in that country, that it requires some resolution, and no small zeal in the cause of science, to encounter the obstacles and annoyances that meet one at every step. The trading pursuits of by far the greater portion of persons resorting to

* For some account of Osbeck, see Chinese Repository, vol. III., p. 85.

Canton and the ports formerly open to the eastward, have also prevented the extension of researches in natural history.

The embassy of Lord Macartney formed an era in this subject, as in most others connected with China, being amply provided with intelligent and enlightened men who made the best of the opportunities which they enjoyed. In Staunton's Embassy and in Barrow's Travels there is much valuable information relating to the subjects of the present chapter. In the second volume of Staunton we find four considerable lists of Chinese plants: the first comprises those found between the shores of the Yellow Sea and Peking; the second, the plants observed near Peking and *Je-ho* in Manchow Tartary; the third relates to the productions of Shantung and Keang-nân; and the fourth extends the observations down to Canton.* Had it not been for the foolish jealousy and apprehensions of the Chinese, the embassies might have been rendered much more instrumental than they were to the promotion of natural knowledge. The natives can so ill appreciate the motives of men who pursue science for its own sake, that they always couple with the eager researches of Europeans all kinds of fanciful apprehensions, respecting the ulterior designs which they may entertain while surveying and examining the face of the country.

A most able and indefatigable naturalist was appointed to attend the mission of Lord Amherst in the person of Dr. Clarke Abel, but a tissue of misfortunes unhappily frustrated his objects and hopes. Soon after his arrival in the country, a brain fever, brought on by exposure to a burning sun in the prosecution of his inquiries, confined him to his bed during a considerable portion of the journey, and in fact did all but bring him to the grave. Much, however, was effected by the activity of his numerous

* Embassy, vol. ii., p. 165, 276, 435, 524.

friends, who brought him all the specimens they could collect to enrich his herbarium and cabinet. The leisure of about a month, after reaching Canton, enabled him to classify and arrange his acquisitions in the way of plants and minerals, and to pack them for conveyance home. But the crowning disaster still remained. It is well known that the *Alceste* frigate, in which Lord Amherst and his suit embarked for England, was wrecked in the straits of Gasper on a sunken rock. There the fruits of so much diligence and care were irrecoverably lost, or, as Dr. Abel himself emphatically exclaimed, *Ibi omnis effusus labor!* Some specimens fortunately reached England with Sir George Staunton, in a separate ship, and, among the few that escaped the wreck, one new plant received from Sir Joseph Banks the name of *Abelia Chinensis*.

Among the resident English in China who have devoted their attention to the natural history of the country, the names of Messrs. Beale, Reeves, and Livingstone are associated with most of the later acquisitions that have been made by us in zoology and botany. The botanic garden of the first of these gentlemen at Macao, though far from extensive in its limits, contains what in this country would be deemed a precious selection of trees and plants; and has in fact served as the nursery in which some of the rarest productions of China have been prepared for transmission home. In the garden is an aviary of curious or beautiful birds, and as this is unique in its way, it may be described from the work of Mr. Bennett, who visited China in 1833.* The aviary is forty feet in length by twenty in breadth, and probably thirty feet high: it is divided into two portions, having communications between them,

* Wanderings, &c., vol. ii., page 50. This work contains a highly interesting description of a *live* bird of paradise belonging to Mr. Beale; the species which Linnæus himself, strange to say, named *Apoda*.

which are usually left open, but capable of being closed if necessary. It is contiguous to one side of the house, the windows of which look through the latticework into the aviary; and the whole of the enclosure above and around has a similar latticework of fine wire, surmounted by a dome at the summit.

In the aviary large trees and a variety of shrubs are planted for the convenience of the inhabitants. In the branches of the former are placed small baskets to assist as nests to those birds whose habits lead them to build in trees, and in the same branches many of the present inhabitants of the aviary have been born and reared. Near a tank, constantly filled with water, a quantity of artificial rockwork is constructed, forming an ornament to the aviary, as well as an asylum for birds of that class who are accustomed to such situations when at liberty, and who breed in the crevices. Every precaution is taken to prevent the ingress of rats around the aviary, the attacks of those animals having caused much destruction among the birds when the place was first erected. There are separate cages for enclosing the males of any of the species who may have their combativeness too highly excited. The punishment for such characters is in the first place solitary confinement, and should they not reform under that treatment, they are finally dismissed the aviary as incorrigibles. It once happened, Mr. Bennett relates, during a total eclipse of the sun, that, as that luminary became overshadowed, the feathered colony, if not in consternation at the event, was exceedingly perplexed at the rapid and untimely termination of the day, and all retired supperless to bed; they received, however, a second surprise, at the briefness of the night; for, before they could be well asleep, the cocks crowed at the reappearance of the sun, and all again resumed their daily amusements and occupations.

We shall have to particularize hereafter some of Mr. Reeves's numerous contributions to natural history; but may notice in this place a paper of Mr. Livingstone,* addressed to the Horticultural Society, in which that gentleman reviews the means that had been adopted for enriching this country with the botanical productions of China, and states the remarkable majority of cases in which attempts to convey plants home had totally failed. It had been long the practice for individuals to purchase plants on the spot, and to carry them to England in the best manner that a long passage of four or five months at sea appeared to admit of. At a short distance above Canton, by the side of a creek or branch of the river, are a number of small nursery gardens, well known by the name of Fâ-ty, or the "flower grounds." Each of these contains nearly the same collection of plants, formed to meet the usual demand of Europeans. It was here, Mr. Livingstone observes, that the purchases were made with no sparing hand, notwithstanding the general want of success which they had pretty uniformly experienced.

About the year 1804, a Scotch gardener was sent out from the royal gardens at Kew, for the purpose of enriching that splendid collection with the stores of China. Great pains were taken to supply him with the most judicious instructions, and the cabins for the reception of the plants were contrived with care. Yet with every facility and advantage, it seems that, on comparing the plants actually sent with those which reached Kew alive and in a healthy state, this gardener was not more fortunate than private adventurers. It must be observed, however, that he did not attend the plants home, but remained in China to procure new ones. They accordingly fell victims to the ignorance or the neglect of those on board the ships, who either gave them

* Indo-Chinese Gleaner, vol. ii., p. 126.

too much water or none at all, and who exposed them to the spray of the sea in bad weather, or denied them a needful supply of fresh air in fine. The gardener himself, in the mean while, leading a solitary life in China, gave way to habits of intoxication, and became unfit for his business. Since that time no other attempt of the kind has been made; but it seems obvious that all the care and attention in selecting or preparing rare plants in China will be of little avail, unless they are under proper skill and management during the long voyage home. Mr. Livingstone calculates that not more than one plant in a thousand has reached England in safety; but if we take only *half* the proportion, it will be very lamentable to those who appreciate the advantages of enriching this country with the useful or beautiful productions of foreign soils.

As animals are, for obvious reasons, more generally diffused over continents than plants, it follows that the number of cases in which the zoological productions of China have been found peculiar to that country, or not known in other parts of Asia, are extremely rare in comparison with the botanical ones. It has been always remarked that in either instance, whether of plants or animals, they are such, in general, as characterize a temperate, and not a tropical climate. For this reason the larger and more ferocious descriptions of carnivorous quadrupeds are neither numerous nor common. In the forests of Yun-nân, to the southwest, the Bengal species of tiger is said to exist: indeed the numerous representations of that animal, and the stories connected with it in Chinese books, are proofs that it is sufficiently well known in the empire. At Canton, however, which lies so nearly in the latitude of Calcutta, it is quite a stranger, as well as in those provinces to the north through which our embassies passed. Some smaller animals of the same genus were seen by Père Gerbillon when he went with the emperor

on his hunting excursion to the north of the Great Wall, as well as bears, and an abundance of deer. Lions are almost a fabulous animal among the Chinese. Specimens may have reached Peking from some of the neighbouring countries to the south and west, but the Asiatic lion is quite a different animal, and much inferior in power to the African species. The woods of Southern China abound in a fierce and untameable, though small description of wild-cat. With a taste that is quite unaccountable to ourselves, this animal is considered by Chinese epicures as an exquisite species of *game*, and served up in stews at table, after being fed for some time in a cage. By way of a great compliment, some gentlemen were asked to partake of the flesh of one of these wild grimalkins; but they of course declined the flattering invitation.

The domestic dog of China cannot be better described than in the words of that accurate observer, Mr. White of Selborne. "My near neighbour, a young gentleman in the service of the East India Company, has brought home a dog and bitch of the Chinese breed from Canton; such as are fattened in that country for the purpose of being eaten. They are about the size of a moderate spaniel, of a pale yellow colour, with a coarse bristling hair on their backs; sharp upright ears and peaked heads, which give them a very foxlike appearance. Their hind legs are unusually straight, without any bend at the hock or ham, to such a degree as to give them an awkward gait when they trot. When they are in motion, their tails are curved high over their backs like those of some hounds, and have a bare place each on the outside from tip midway, that does not seem to be matter of accident, but somewhat singular. Their eyes are jet black, small and piercing, the insides of their lips and mouths of the *same colour*, and their tongues blue. The bitch has a dew claw on each hind leg; the dog has none. When

taken out into a field the bitch showed some disposition for hunting, and dwelt on the scent of a covey of partridges till she sprang them, giving tongue all the time. The dogs in South America are dumb; but these bark much in a short thick manner like foxes, and have a surly savage demeanour like their ancestors." The account goes on to state that these dogs are "not domesticated by the Chinese, but fed in sties." This, however, is a mistake, for although often eaten, they are very generally domesticated as guards, and a vigilant watch is called *shen-kow*, "an accomplished dog." The food on which they subsist is principally vegetable, and consists mainly of rice. This race of animals closely resembles the breed represented in the plates of the arctic voyages, and seems to extend along the whole of Northern Asia and America, being perhaps the original of the species.

Bears are quite common in the hilly parts of Shensy, west of Peking. They have often been seen in cages at Canton, whither they had most probably been brought from the westward, perhaps from Yun-nan or Sze-chuen. The paws of these animals, which abound in fat, are eaten by the Chinese as a delicacy. The country upon the whole is too well cultivated and thickly peopled to afford lodging and entertainment to many of the larger wild animals, however much they may have abounded originally. Similar reasons may account (besides climate) for the paucity of the quadrumanous tribes of apes and monkeys. Some of these animals exist on the island of Lintin, near the mouth of the Canton river; but it is most probable that they are descended from a few individuals of the genus, which may have got loose upon the island from the numerous junks and ships perpetually arriving from the seas to the south.

Dromedaries are much used as beasts of burden between Peking and Tartary; but in China itself the

reasons which cause human labour to supplant every other have prevented their being adopted; nor did we see one of these animals between Peking and Canton throughout the whole empire. Chinese horses are but rare, and of a very poor and stunted breed, probably from the same cause that renders their horned cattle so extremely diminutive—the deficiency of food and care. For their size, however, the horses are bony and strong, about the size of, or a little larger than Shetland ponies, and at the best very rough and ill kept, with their fetlocks overgrown with hair. There is a white spotted species, often represented in Chinese pictures, and which might be considered as the produce of imagination, had it not been verified by the actual observations of our embassies. The whole equestrian establishment of a mandarin, or person of wealth, is ragged and beggarly in the extreme: they have no idea whatever of either condition or neatness in the turn out of their horses. Asses and mules are common in the north of the empire. The mules are generally of a good size, and said to bear a higher price than horses, as being capable of more labour on less food.

Of the common ruminant animals, the Chinese possess several species of deer, particularly a spotted kind, which is sometimes kept about their residence. Gerbillon describes a variety of antelope abounding in the borders of Mongol Tartary, and called by the Chinese *Huang-yang*, "yellow goat." This animal is found towards the sandy desert of Shamo, together with vast numbers of hares and a peculiar sort of birds styled in Chinese "sand partridges," perhaps without being a true variety of that species, for they are not very exact in their nomenclature. The sheep of China are the large-tailed kind, so common in Africa; and this extraordinary determination of fat to the tail would almost appear to be the reason why they are found not to be such good

stock as European sheep. As the Chinese themselves never use milk, cows are only met with near Canton or Macao, of a peculiarly small breed; perhaps the very smallest of the ox tribe, as they sometimes do not exceed the dimensions of an ass; being at the same time of a clean and symmetrical shape, and without the hump common to the kine of India. The buffalo used in ploughing up rice fields is also a very small species, not so large as our English cattle, with a skin of dark slate colour, thinly covered with hair. It has all the sluggish habits of the species, and in summer seeks refuge from the flies that torment its hairless hide, by plunging up to the nose in muddy tanks, where it rolls in the ooze and covers itself with a coating of soil. These ugly animals are rendered very tractable by those who use them in agriculture, and may generally be seen driven by a young boy, who will occasionally fall asleep upon the beast's back. It is probably in consequence of the derivation of the Budhist religion from India that most Chinese have a prejudice against eating beef of any kind.

The domestic pig of China is well known in this country, where it has been introduced freely into our farmyards, from being found an excellent and thriving stock on the homeward voyage. Pork is the only flesh food that a Chinese of the lower ranks ever consumes; and even this is commonly substituted by salt fish, as a cheaper aliment, mixed with rice. The wild boar may be found in the half-reclaimed countries on the western borders, but not in Central China, or on the east coast, where tillage and population have arrived at their present height. Of the other wild pachydermatous tribes, the elephant is not at present an inhabitant of China, unless it be in Yun-nan, nor is he used in that empire for purposes of either peace or war. The emperor has a few at Peking, but they are sent as a tribute from Siam or elsewhere, and merely kept for curi-

osity and state. The one-horned rhinoceros of Asia is found in the forests of the extreme west and south. The horn is sometimes converted, by carving and polishing, into a sort of cup, the root or point of junction with the nose being hollowed out, while the summit of the horn serves as the pedestal or handle. The notion of its being a charm against poison was imported probably by the Mongols from India.

There is a curious notice of the Siberian mammoth in Sir George Staunton's translation of the Chinese Embassy to the Tourgouths. "In the very coldest parts of this northern country," says the writer of the narrative, "a species of animal is found, which burrows under the earth, and which dies if it is at all exposed at any time to the sun and air. It is of great size, and weighs 10,000 *kin*. Its bones are very white and shining, like ivory. It is not by nature a powerful animal, and is not therefore very dangerous or ferocious. It is found generally in the mud upon the banks of the rivers. The Russians collect the bones of this animal, in order to make cups, saucers, combs, and other small articles. The flesh of the animal is of a very refrigerating quality, and is eaten as a remedy in fevers." This account of the popular notions prevalent among the natives corresponds, as the translator observes, nearly with that given by Mr. Bell. He indeed qualifies it, by adding that he gives it only as the report of the superstitious and ignorant; and he says nothing of the flesh having been eaten. More recent discoveries, however, have confirmed the truth of a portion of these relations; for not only bones, but the flesh of the entire Siberian elephant has been found undecayed amid the ice and snows.

The ornithology of China is distinguished by some splendid varieties of gallinaceous birds, as the gold and silver pheasants, to which have been lately added the *Reeves's pheasant*, deserving of a particu-

lar description from Mr. Bennett. The longest tail feathers approach the extraordinary dimensions of six feet, and even in the spacious aviary of Mr. Beale, already described, it was found that the ends of these magnificent trains were broken by the bird's movements. As they come quite from the north, it has proved extremely difficult to procure specimens, nor has the hen bird ever been obtained. Four cocks were brought to Canton in 1830, and purchased for a hundred and thirty dollars, or about thirty pounds sterling. These furnished the specimens brought home by Mr. Reeves; the difficulty of procuring the females being attributed either to a determination on the part of the sellers to prevent the birds being bred, or to their imagining that the inferior plumage of the hens might render them less attractive to purchasers. This obstacle is the more to be regretted, as the high latitude from which the species are procured renders it likely that they might be propagated here in a natural state. Another description is called by Mr. Bennett the *medallion* pheasant, from a beautiful membrane of resplendant colours which is displayed or contracted according as the animal is more or less roused. The brilliant hues are chiefly purple, with bright red and green spots, which vary in intensity according to the degree of excitement; and become developed during the early spring months, or pairing season of the year.

The country abounds in wild fowl of all kinds, among which the immense flocks of geese, which during the winter months cover the Canton river, always excite the notice of strangers. They migrate to the north during the summer, and are distinguished, like all the tribe, by their gregarious habits; but the Chinese, without any apparent foundation in fact, make use of them as emblems of connubial attachment, and as such they are always carried in wedding processions. There is much

more ground for this character in the instance of the *Yuen-yang*, a teal of splendid plumage, usually called the "Mandarin duck," whose name is, with reference to the same conjugal quality, applied figuratively to two species of fine black tea, which are generally put up in the same box, and used *together*: these are pekoe, and a superior kind of souchong. Mr. Beale's aviary afforded a singular corroboration of the fidelity of the birds in question. Of a pair in that gentleman's possession, the drake being one night purloined by some thieves, the unfortunate duck displayed the strongest marks of despair at her bereavement, retiring into a corner, and altogether neglecting food and drink, as well as the care of her person. In this condition she was courted by a drake who had lost his mate, but who met with no encouragement to his addresses from the widow. On the stolen drake being subsequently recovered, and restored to the aviary, the most extravagant demonstrations of joy were displayed by the fond couple.* But this was not all, for, as if informed by his spouse of the gallant proposals made to her shortly before his arrival, the drake attacked the luckless bird who would have supplanted him, beat out his eyes, and inflicted so many injuries as to cause his death. Specimens of these curious and handsome birds have been brought to this country, and some that were placed in the Zoological Gardens have been successfully bred. The plumage of the female is as plain as that of the drake is ornamented; but the male, during four summer months, changes his feathers and becomes as plain as his mate. This teal, unlike the rest of the palmipedes, generally roosts in high situations, upon trees or rocks, and his favourite position was over the windows of Mr. Beale's aviary.

Wild ducks are as numerous near Canton, during

* Mr. Bennett's "Wanderings," vol. ii., p. 62

the winter months, as the geese. They abound es pecially in the interior, on those extensive shallow lakes through which the canal is carried; and the ingenious mode of catching them is very character istic of the Chinese. Large hollow gourds are purposely thrown into the water in great numbers, and allowed to float about. The birds being at length accustomed to approach these with impunity, their captors disguise themselves by placing similar gourds over their heads, with holes to see and breathe through, very much in the manner of a helmet. Then wading quietly along the shallow waters, with their bodies immersed above the shoulders, they have nothing to do but to approach the birds gently, and pull them under water by their legs in succession. It has been remarked that the same practice has been recorded by Ulloa of the natives of Carthagena, in the New World, upon the lake Cienega de Tesias.

The fishing cormorant, employed on the same lakes, has been pictured in the folio plates to Staunton, and described as "a brown pelican or cormorant, with white throat; body whitish beneath, spotted with brown; tail rounded; irides blue; and bill yellow." While fishing, these birds are prevented from swallowing what they catch by means of a ring over the lower part of the neck; but when the work is over this ring is removed, and they are allowed to feed upon the refuse. Sometimes, however, they are said to be so well trained, as to need no restraint as to feeding whatever. A few of them were observed as far south as Keang-nan, in the neighbourhood of the Mei-ling pass.

A species of pelican has been seen on a group of rocks called the Nine Islands, lying about six miles northeast of Macao, but it is probably quite distinct from the variety that is used in fishing. Among the miscellaneous birds of China may be enumerated quails, often trained to fight; the common ring dove,

of which great numbers breed in the woods about Canton; and the peculiar crow of the country, which is marked with white about the neck. It has been noticed already that this bird is considered sacred, either for some service that he is supposed to have rendered the present dynasty, or because he is the emblem of filial duty; from a notion, well or ill founded, that the young ones assist the old when they are disabled. In Europe, the same character has been attributed to the stork; but the stork is, in China, considered as emblematical of long life. Figures of this bird, as well as of the pine tree, are represented on the visiting tickets which are left at the new year; and they imply the wish that the person so complicated may have "many happy returns of the season." Among the other common birds of China, we must not omit a delicate species of ortolan, which appears in the neighbourhood of Canton about the time when the last crop of rice is cut. As it feeds on the ears of grain, it is for that reason called the "rice bird," in the same way that the term *wheatear* is applied to a similar description in the south of England. Mr. Gray, in his Zoological Miscellany, has given the descriptive characters of twelve species of birds belonging to a large collection brought home by Mr. Reeves.

But it is time to quit this part of the subject, and to notice those reptiles of China that have come under observation; concerning which it is remarkable that the largest kinds of saurians, as the crocodile and alligator, are unknown even as far south as Canton. Great numbers of the small lizard tribes are visible during the hot months, some of them infesting trees and shrubs, while others inhabit holes in rocks or old walls. Several fresh-water tortoises have been lately sent home, and described in the zoological proceedings for 1834; and two new genera of batrachians, or the frog kind, are noticed by Mr. Gray. Notwithstanding its situation under the

tropic, Canton is little infested by the venomous kinds of serpents. The species most dreaded is a slender snake between two and three feet in length, and called by the Chinese "the black and white," from being surrounded from head to tail with alternate bands of those colours. Mr. Bennett brought home an individual of this species, which had been killed after biting a Chinese on the foot and causing his death in a few hours. The head was cut off by a countryman of the sufferer who came to his assistance, and who, having bruised it, applied it as a poultice to the bitten part. It may be questioned, as the narrator observes, whether the poison mingled with the mashed head may not have served to hasten the fatal termination.

Of fishes, a large collection of Chinese specimens has been lodged by Mr. Reeves in the British Museum. The golden carp is one of the most distinguished kinds, and has long been known and propagated in Europe from the original specimens which were carried by the Dutch, first to Java and thence to Holland. They ornament most of the gardens in China, being kept in artificial ponds, or large earthen and porcelain vessels, interspersed with tufts of mosses or ferns over rockwork. It is sometimes necessary to cover these ponds with nets, to preserve the inmates from numerous kingfishers which come early in the morning to prey on them. Of edible sea fish, the best kind near Canton is a sort of rock-cod, called *shek-pan*, which has exactly the meaning of that term. A flat fish, called *tsang-yu* by the Chinese, and "pomfret" by Europeans, is esteemed, but inferior to the first. Soles are good and plentiful; but the fish most valued by native epicures is the sturgeon, partly because it is scarce, and partly on account of its gelatinous nature—a quality always valued in the dishes of the country. The Chinese stew made from this dish is so palatable, as to have been introduced at the tables of

Europeans. Some gastronome or other has observed, that every country affords at least *one good dish*.

Among insects, it has been elsewhere observed, that the locust commits occasionally great ravages in particular districts, and rewards are given for its destruction. Some of the most poisonous tribes, as scorpions, are not met with at Canton; but the centipede, which the Chinese call by exactly the same name, *pe-tso*, (hundred feet,) is common. There is a monstrous spider that inhabits trees, attaining to such a size and strength as to enable it to devour small birds. A large species of *cicada* is common also among trees, emitting a loud and even stunning noise by the vibration of two flaps under the abdomen, supposed to be a call to the female. They generally keep up this whizzing sound most constantly during the hot sunny days. Dr. Abel enumerates the *Scarabæus molossus*, the *Cerambyx farinosus*, as well as the mole cricket, of a large size. At a mountain lying eastward of Canton, called Lofow-shan, there are butterflies of gigantic size and very brilliant colours, so celebrated as to be alluded to in poetry, and a selection of the most splendid specimens sent annually to Peking. The *pe-la-shoo*, or wax tree, affords nourishment to an insect which is supposed to belong to the coccus tribe, but has not been very exactly ascertained. In the Asiatic Researches (vol. xiv., p. 182) is described an Indian insect, which generates a featherlike secretion from its abdomen; this, dropping on the leaves, hardens there into a substance resembling wax. It is probably identical with the species observed by our first embassy on the coast of Cochin-China, which is figured in the first volume of Staunton,* and described as "of a curious structure, having pectinated appendages rising in a curve bent towards the head, not unlike the form of the tail feathers of the com-

mon fowl, but in the opposite direction. Every part of the insect was in colour of a perfect white, or at least completely covered with a white powder." The stem of the particular shrub, resembling privet, which was covered by the insects, was entirely whitened by a similar substance.

In the department of botany, our limits will not admit of our noticing any but the most remarkable or important plants and trees of China. At the head of these of course stands the tea plant. The specimens brought from the *black* and *green* tea countries differ slightly in the leaf, the latter being a thinner leaf, rather lighter in colour, and longer in shape than the other. But, besides this, the great difference in the preparation contributes to mark the distinctions between the two kinds of the manufactured article; for the Chinese themselves acknowledge that either black or green tea may be prepared from any tea plant. The green teas are less subjected to the action of fire than the black, and therefore retain more of the original colour, and peculiar qualities of the leaf; but they are at the same time infinitely more liable to suffer from time and damp. If the two kinds of tea leaves are examined, after having been expanded in hot water, it will be observed that the black contain the stems of the leaves, as well as a portion of the stalks on which they grew, while the hyson leaves have generally been pinched off above the leaf stem. The black tea thus contains much of the woody fibre while the fine green is exclusively the fleshy part of the leaf itself, which is one good reason why it should be dearer.

Che-keang produces green tea; but the principal district is in Keang-nân, at the northwest extremity of a range of hills dividing that province from Che keang, between the thirtieth and thirty-first parallels of north latitude. The tea plant was first seen by us in the embassy, on the return from Peking

not far from this district, on the southern bank of the Yang-tse Keang, where the soil was composed of a micaceous sand. The black tea country is in Fokien, between 27° and 28° latitude, on the south-east declivities of a range of hills dividing that province from Keang-sy. The tea shrub succeeds best on the sides of mountains, where there is a small accumulation of vegetable soil. We observed it always elevated above the plains, in situations where the soil was a disintegration of sandstone or of granite, similar to the *habitat* of the single camellia, from whose seeds an oil is extracted. Dr. Abel hence infers that the hills at the Cape would afford the best situation and climate for the growth of tea; and it has been actually found to flourish on the higher parts of St. Helena. As a substitute for tea, the poorer Chinese sometimes use an infusion of dried fern leaves, and we found these commonly sold for the express purpose near the Poyang lake.

The *camellia* bears the same name, among the Chinese, with the *tea shrub*, and possesses most of its botanical characters. They in fact constitute two genera very closely allied, of which the distinctions, consisting principally in the seed, have been accurately noted by Dr. Wallich. The seed vessel of the tea is a three-lobed capsule, with the lobes strongly marked, and each of them of the size of a black currant, containing one round seed. When ripe, each of the three lobes bursts vertically in the middle and exposes the seed. The capsule of the camellia is not lobular externally, but contains altogether three seeds, like that of the tea, though of a longer shape.

In the year 1834, it was discovered that the real tea plant was indigenous to the company's territories in Upper Assam, bordering on the Chinese province of Yun-nân: and there now appears to be every reason for feeling certain that it may be cultivated under proper management, with complete suc-

cess for commercial purposes, as well as for local consumption.

In our works of more than a century back, as in the Spectator, Pope's poems,* &c., we always find the term bohea applied to the best tea. Our principal trade was then at Amoy and Chinchew in Fokien; and the name, as before observed, is corrupted from the appellation of a celebrated† mountain in the black-tea districts of that province. The term is now applied in England to the lowest description of black tea, called by the Chinese *Ta-cha*, "large tea," from the size of the leaves, which are allowed to remain on the shrub until they are full grown and coarse. It is a general rule, that all tea is fine in proportion to the tenderness and immaturity of the leaves. In the green-tea districts the plants themselves are never allowed to reach a large size, but frequently renewed; while, in the black, both the plant and the leaves that form the last picking, attain their full growth. The finest black tea, called pekoe, consists of the spring buds as they begin to expand; and, in like manner, the tender leaflets of the green-tea plant are made into an expensive kind called *Loong-tsing*, or hyson-pekoe, which is highly esteemed by the Chinese, but not brought to Europe, as it is so delicate and slightly fired as to spoil with the least damp. But we are anticipating the subject of tea as an article of *commerce*, which will come under a future chapter.

The *Laurus camphora*, one of the most remarkable productions of China as well as Japan, is a fine timber tree, growing, in the southern provinces, to the height of fifty feet, and sometimes measuring twenty in circumference, with large branches eight or nine

* Where none learn ombre, none e'er taste bohea."
Rape of the Lock.

† Soong-lo, a general name for all *green* tea, is also a name of another mountain in Keang-nan, about latitude 30.

feet in girth. From the wood, which is highly scented with camphor, are obtained great quantities of that gum resin. The process has been very exactly described by Dentrecolles. Fresh-gathered branches, cut into small pieces, are steeped in water for some days, and then boiled in a proper vessel, being continually stirred about with a stick until the gum begins to adhere in the form of a white jelly. The fluid is next poured into a glazed vessel, and being left at rest for some time is found concreted. The crude camphor is then purified by sublimation as follows: A layer of dry earth finely powdered is laid at the bottom of a metal vessel; on this is placed a layer of camphor, and then a layer of earth, and so on alternately until the vessel is filled, and the series terminated by a layer of earth; over this is laid a covering of green mint. A second vessel is now inverted over the first, and luted on. The whole is then put over a regulated fire, and afterward allowed to cool, when the camphor is found to have sublimed and attached itself to the upper vessel. The wood of the camphor tree is very extensively used for chests and furniture, being proof against insects. As it works without any tendency to splitting, it is excellently calculated, and much employed at Canton, for building European boats. Another wood, that of the *Melis azedarach*, vulgarly called "shamwood," is also a very common material among carpenters.

On the northern limits of the Canton province two species of fir, the *Pinus Massoniana* and *Lanceolata*, grow in abundance. The summits of the limestone cliffs, which border the river soon after its comment to the south of the Mei-ling pass, supply the large rafts of fir which are floated down with the stream. These are formed of smaller rafts united together by twisted osiers, and support the wooden dwellings of those who guide them along by means of long bamboo poles. The *Nan-mo*, a description

of cedar which resists insects and time, appears to be exclusively used for imperial dwellings and temples. It was an article of impeachment against the minister of Kien-loong, who was put to death by the son and successor of that monarch, principally on account of his enormous wealth, that he had presumed to use this wood in the construction of his private palace. The *Tsze-lan*, also called *Mo-wang*, or "king of woods," is much valued as a material of furniture, and somewhat resembles what we denominate rosewood. A common tree in the south is the *yang-shoo*, or bastard banyan, being a variety of the *ficus religiosa*.

The same neighbourhood produces the *dryandra cordata*, from the seeds of which the Chinese extract a varnish for boats, and coarser implements of use. Being insoluble in water, it is found very useful as a coating for tubs and basins, besides covering the paper umbrellas of the country, large quantities of which are exported to India. The fine varnish, however, is obtained from the *Tsie-shoo*, or lacker shrub, a species of *rhus*, from which the varnish distils like gum. It is said by the Chinese to be unwholesome to the manufacturers in a liquid state, and these poisonous qualities, which it possesses in common with many vegetable varnishes, are guarded against with great caution by the persons who collect it. They are said to work with masks over their faces, and with hands covered. The lackered manufactures of the Chinese are well known; and though the varnish is commonly used with a jet black, or with red, it is capable of taking all colours.

The *Croton sebiferum*, from which the Chinese obtain their tallow, has already been noticed; and it has been observed that the use of vegetable substances was probably thus forced on them, by the want of a sufficient number of the larger animals in their general economy. "The seed of the croton," as Staunton remarks, "in its external appearance,

bears some resemblance to the berries of the ivy. As soon as it is ripe the capsule opens and divides into two, or more frequently three divisions, and, falling off, discovers as many kernels, each attached by a separate footstalk, and covered with a substance of a snowy whiteness, contrasting beautifully with the leaves of the tree, which, in this season, (autumn,) are of a tint between a purple and scarlet." Another useful tree, the mulberry, most commonly used in the feeding of silkworms, though the same species, differs in some degree from that of Europe in its growth. The leaves are smaller, of a lighter green, and much thinner. The fruit is produced, when required, in great quantities, but it is small, sweet, and insipid. The principal cultivation of the young tree for feeding silkworms is near Soo-chow in Keang-nan, not far from the sea, and in one of the finest climates of the world. Between that city and Hang-chow Mr. Barrow observed "plantations of the mulberry tree were extended on both sides of the canal, and into the country beyond the reach of sight. They appeared to be of two distinct species; the one the common mulberry, *Morus nigra;* and the other having much smaller leaves, smooth and heart shaped, and bearing a white berry about the size of the field strawberry.

That gigantic grass, or reed, the bamboo, is so well known in many other countries, that it needs scarcely to be noticed here, except to remark the variety of uses to which it has been put by the Chinese. It is employed in building scaffolding and sheds of all kinds; and the framework of their matted houses, for theatrical exhibitions, is run up with bamboos in a few hours. Some of the numerous varieties of this plant, particularly a black sort, serve as the materials of ornamental furniture. Longitudinal strips of the outer part form towing ropes for boats; and of the small splinters baskets of all kinds are made. The inner portions, beaten into a

pulp, form paper; and the young tender shoots, being the germs of the real stem of the plant, rising out of the ground like asparagus, are used for food in the same way as that vegetable, by boiling or stewing; or they occasionally make sweetmeats. The large tubes serve as pipes when the divisions at the joints have been removed; and, for every purpose wherein strength combined with lightness is required, the hollow cylindrical shape, as in the feathers of birds, is the best adapted. The Chinese agriculturist would be entirely at a loss in numberless cases without the assistance of the bamboo, with which he constructs the fences of his enclosures, and many of the instruments of his husbandry. The siliceous concretion called *Tabasheer*, sometimes found in the interior of the joints, forms an item in their materia medica.*

The plant from which the pithy substance vulgarly called "rice paper," is prepared, seems to be a leguminous species growing in marshes, and found in some parts of India. The square pieces purchased in China are obtained from the stem, which, not being above an inch or two in diameter, is cut in a circular manner, and the cylinder in this manner rolled out and flattened. It is from the same plant, in all probability, that the pith hats of India are made; and the fishermen there are said to use the substance as floats for their nets, the specific gravity being less than that of cork, and the buoyancy so much greater. A number of useful plants are, as might be expected, common to both India and China, among which may be named the cotton shrub and indigo plant; the first of which forms the clothing of the mass of the people, and the last serves as the usual dic for it. Near the flat road between Peking and the Great Wall, Sir George Staunton observed

* The bamboo stem blossoms but once, and then dies, like other grasses.

in the alluvial soil a species of *polygonum* cultivated, and was informed that its leaves, macerated and prepared like those of the indigo, yielded a blue die. This might be tried with advantage in other climates which are too cold for the growth of indigo.

A brief notice only can be taken of the remaining useful plants. The *smilax*, or China root of commerce, commonly known as a sudorifie, is used by Chinese doctors for a variety of complaints, and may be seen growing near Canton. That valuable medicine, rhubarb, grows to the northward, in the cold and mountainous province of Shensy; the colour is originally whitish, and it assumes its red appearance in drying. *Curcuma*, or turmeric, is used sometimes as one ingredient in colouring black tea green to deceive foreigners; and the root likewise forms an article of export from Canton. Ginger is commonly cultivated through all the interior, and sold green in the shops as a vegetable. A fine oil is extracted from the kernels of apricots, to the north; and this is exactly the case among the inhabitants of Tartary, close to the Himmaleh range bordering on Bengal. The Chinese cassia, an inferior cinnamon, is grown in the province of the Kuang-sy, and largely exported in European ships. A species of sea weed, or fucus, found on the sea beach in the neighbourhood of Macao, is used as a jelly. It is first steeped in fresh water, and hung up to dry; being then boiled in water, it acquires, on cooling, the consistence and appearance of a jelly, and is used with various fruits to form conserves. The tobacco plant seems to be grown nearly every where, but has different degrees of strength, varying probably according to soil and climate. To the north it is of a pale colour, and sold in the leaf, which is reduced into a coarse powder by the purchaser. To the south, it is said to owe its occasional reddish colour to being steeped in a solution of opium. It is cut into fine shreds for use, by means of a plane, applied to the edges of a quantity of

leaves strongly compressed. The cultivation of the poppy is forbidden altogether.

Some notice must be taken of the most remarkable fruits and flowers of China. Among the former there are three different species of the orange, as different as one sort of fruit can be from another of the same genus. The first is the China orange of Europe; the second is of a pale yellow colour, but very sweet, and with a highly aromatic rind, being the commonest and cheapest sort in the country; the third, and, perhaps, best sort, has a deep crimson rind when ripe, quite detached from the fruit, the lobes of which are almost loose, with a hollow space in the centre of them. The whole has a flattish shape, sometimes four or five inches in diameter, and the loose skin, when broken, opens like a puff-ball, disclosing the juicy lobes surrounded with a kind of network of fibres. This has obtained at Canton the name of "mandarin orange," which has been converted by botanists into *Citrus nobilis*. The Chinese have, besides, several diminutive species of the genus *citrus;* one of which, called *Kum-kat*, makes a good sweetmeat when preserved whole. Small red limes are common, but they are not equal to the lemon of Europe. The nearest approach to it is a curious result of horticultural ingenuity, by which a peculiar kind of citrus is made to run entirely into the rind, the whole terminating at the head in long, narrow processes like fingers, whence it has obtained the appellation of *Fo-show*, "the hands of Fo." The odour of the mass of rind is very powerful and fine: but so entirely is this strange production the result of art operating on nature, that it does not appear a second time after the plant has been purchased.

The flat peach, a curious natural species to which the Chinese give, on account of its shape, the name *Ping-taou*, or "cake peach," is accurately figured in

the Horticultural Transactions,* from the first specimen produced here in 1822, and thus noticed: "This fruit is of truly singular form, and perhaps will be best described as having the appearance of a peach flattened by pressure at the head and stalk; its upright diameter, taken through the centre, from eye to stalk, being $\frac{1}{16}$ of an inch, and consisting wholly of the stone, except the skin; that of its sides (which swell round the centre) is $1\frac{1}{8}$ inch, its transverse diameter being $2\frac{1}{2}$ inches." Some other curiosities of Chinese gardens are less natural, as their flower pots containing stunted stems with full-grown fruit. The thick branch of a fruit tree is deprived of a ring of bark, and the place covered round with a lump of rich loam. This is kept moist, and when the radicles have pushed into the loam, the whole is taken off and placed in a shallow pot. The branches most loaded with blossoms are selected, and the abscission taking place when the fruit is nearly ripe, they are in that state sold in pots.

When the dwarfing process is intended to be in imitation of old forest trees, the branch which has pushed radicals into the surrounding loam is separated from the tree, and planted in a shallow earthenware flower pot, of an oblong square shape. The pot is then filled with small lumps of alluvial clay, sufficient to supply a scanty nourishment to the plant, and water is added in a regulated quantity. The branches are repressed by cutting and burning, and bent into shapes resembling those of an old forest tree in miniature. Roughness is produced in the bark by smearing it with sweet substances that attract ants; and the plant in time acquires the desired smallness of leaf, and general stunted appearance. The elm is most frequently used for this purpose; nor do the dwarfs require any further at-

* Vol. iv., p. 512.

tention, when once fashioned, than to have the young shoots kept down by clipping.*

Among the peculiar fruits of China, the *Lichi* has been naturalized in Bengal. Another of the dimocarpus sort, called *Loong-yen*, or "dragon's eye," is much smaller and has a smoother skin. The *Loquat* is a fine fruit of the *mespilus* kind, not unlike an apricot in colour and appearance, but is commonly spoiled by being plucked while still immature. A specimen of the ripe fruit was exhibited by the Horticultural Society in 1825, from the gardens of Earl Powis. The *Wampee*, as it is called at Canton, has been sometimes compared to the gooseberry, which, however, it resembles only in size. The fruit, which grows in bunches on a good-sized tree, bearing leaves of a highly aromatic flavour, has a yellow skin (whence its name) enclosing a rather acid pulp that surrounds two or three smooth seeds of a greenish colour. Mangoes ripen in the south of China, but they are small and of inferior quality, and the blossoms often fail in producing fruit: hence it is that when the term "mango flower" is applied to any person, it means that he promises more than he performs."

Grapes in the neighbourhood of Canton are often unsuccessful, the alternations of dry heat and rain being too much in excess, while occasional typhoons tear the vines to pieces. Lord Macartney's embassy found the vine cultivated largely on the borders of the river between Hang-chow and the port of Ning-po, in latitude 30°, whence the fruit is carried in junks to Canton. As the vines spread from the bank, small upright posts are driven into the water at several feet distance, and the branches trained on them, thus gaining space over the shallow water. To the north are both apples and pears; but the latter are tasteless, and the former mealy and bad,

* See a description of the process: Hortic. Trans., vol. iv., p. 230.

though with a fine colour and smell. There is a species of date produced in Shantong, which, when dried like the French plum, has a flattish oval shape, and a dark red colour, with shrivelled skin and pleasant sweet taste. To the north also are walnuts; with two kinds of chestnuts, one the common European species, the other a dwarf kind, the nuts not larger than filberts, and only one in each capsule. The Chinese have, besides, the *Arachis hypogæa*, or groundnut, which is extensively cultivated for the sake of its oil, the common food of their lamps. The seeds, although originally a part of the flower, ripen in a singular manner under ground; and, previous to gathering them, the stems of the plants are cleared away with a hoe. The seeds are then taken up with the earth, and placed in a large sieve suspended between three poles, one man feeding the sieve, while another shakes it and separates the dirt. The arachis has been found to thrive in this country, when placed in a tan pit with pines, each plant affording from twenty to thirty pods.

At the head of cultivated flowers the Chinese place the *Nelumbium*, or sacred lotus, whether considered in regard to its utility or its beauty. It is often raised for mere ornament in capacious earthenware or porcelain tubs, containing goldfish. Its tuliplike, but gigantic blossoms, tinted with pink or yellow, hang over its broad peltated leaves, which in shape only, but not in size, resembles those of the nasturtium, the stalk being inserted near the centre of the leaf. When cultivated on a large scale for the sake of its seeds and root, which are articles of food, it covers lakes and marshes to a wide extent. The seeds, in form and size like an acorn without the cup, are eaten either green or dried, when they resemble nuts. The roots are sliced and eaten as fruit, being white, juicy, and of a sweetish and refreshing taste. Another highly esteemed flower is the *Olea fragrans*, consisting of minute florets of a white or

yellow colour, growing in bunchy clusters, just where the leaves spring from the twigs. It flowers through a great part of the year; and in damp weather the fine odour of the blossoms is perceived at some distance. The fruit is a small olive; but it seldom appears on the trees, which commonly shed their flowers without fruiting. The slow growth of the shrub justifies the expression of *Tardæ cresentis*, applied by Virgil to its congener, the common olive. It is remarkable that a branch of this fragrant olive is one of the rewards of literary merit, and an emblem of studious pursuits. The capital of Kuang-sy province is named Kuei-lin-foo, from the country's abounding in plantations of the *kuei-hua*, or *olea fragrans*.

The famous *Mow-tan*, or tree piony, scarcely survives a year so far south as Canton, and never blossoms there twice: very large prices are sometimes given by the Chinese for the plants which are brought to that place. A flower much cultivated is the *Chrysanthemum indicum*, which is valued for the variety and richness of its colours. The Horticultural Society is in possession of forty original drawings from China, depicting as many varieties of the flower. Upward of twenty are now cultivated in this country; and some very beautiful specimens have been depicted in the Transactions.* The *Moo-le-hua*, (jasminum grandiflorum,) a powerful smelling white flower, is sometimes worn in China, as well as all over the East, by women in their hair, and has given rise in the former country to a song, of which the music may be found in Barrow's Travels. The *Choo-lan*, (*chloranthus inconspicuus*,) a small, greenish-yellow blossom, resembling strings of beads, is used in scenting the tea that bears its name. As a wild plant, the *Myrtus tomentosa*, or downy myrtle, of which the flowers, when they first expand, are . . a

* Vol v, p. 152.

rose colour, grows in great beauty on the hills of the Canton province; as does also, in Keang-sy, the *Eugenia mycrophylla*, a very beautiful myrtle-looking plant that covers the sides of every hill, and of which the thick terminal clusters of berries are eaten as fruit.

For such scattered lights as we possess of the geology and mineralogy of the Chinese empire, we are principally indebted to the observations of the two embassies of 1793 and 1816; and it may therefore be as well to give a summary of these observations in the order they were made, from the first landing of the missions in the Peking gulf, to the termination of their journeys at Canton. That portion of the most northern province that extends from the mouth of the Peiho to Tien-tsin, where the canal terminates, bears every mark of a recent and alluvial formation. There is not a pebble to be seen; but the whole flat consists of a mixture of clay and sand in strata alternating with beds of shells. So little is the country raised above the ordinary level of the river which flows through it, that there seems some difficulty in confining the latter within its bed. "If the obstacles," observes Staunton,* "that deflect a river's course consist of rocks or elevated compact ground, no subsequent accidents are likely to change the bed once formed; but if the waters flow through a country nearly level, and between banks of so loose a mould as to be incapable of resisting a partial swell, or rapid motion of the river, it will probably on such occasions form new and circuitous channels for itself. It did so in the present instance, and to a degree of inconvenience which appears to have induced the government to take pains for confining it within its usual bounds; and accordingly, extraordinary quantities of earth have been placed along its sides, in order immediately to fill up any breach

* Embassy, vol. ii., p. 17.

which from time to time might be made in them. There are mounds of this kind in the form of truncated wedges all along the banks of the Peiho, which may have partly been composed of mud collected from the river's bed. At present the banks of the river are higher than the adjacent plains. Those plains extend as far as the eye could reach: and the windings of the river through them made the masts of the vessels, sailing on it, appear throughout the country as if moving over the fields in every direction, while the water lay concealed."

Between Peking and the Great Wall, on the way to Je-ho, or the "hot springs," lying to the north-east in Manchow Tartary, our first embassy observed, for the only time in China, a *chalky* appearance,* and geological features approaching those familiar to us in the southeast of England. In the whole distance between Peking and Canton, no secondary formation so recent as chalk has been met with; and at the latter place a cargo of English flints in ballast always finds a market, being used as a material in the manufacture of coarse glass. The plain on which Peking itself stands is an alluvial flat; but the country rises rapidly into mountains towards the west, where the Chinese are said to obtain great quantities of coals for the use of the capital. These coals, from the specimens supplied to the last embassy, Dr. Abel supposed to be a species of graphite, which, from its analysis, has been found allied to Kilkenny coal. Of the higher mountains bordering on Tartary, those who accompanied Lord Macartney observed that the lowest stratum was of sand and sandstone; the next above was coarse-grained limestone, full of nodules, and of a blue colour; this was covered by an irregular and very thick layer of indurated clay, of a bluish and sometimes of a brown red colour, communicated by iron, which in places

* Embassy, vol. ii, p. 173.

was so abundant as to give the clay the appearance of ochre. In some parts were perpendicular veins of quartz, intermixed with granite at the tops of the mountains.

When the embassies entered on the canal, they met with nothing but a succession of swamps and lakes, through the provinces of Shantung and the northern part of Keang-nan, affording cultivation on a large scale to the *Nelumbium*, or lotus, and the *Trapa bicornis*. This is the country which, from the earliest ages of Chinese history, appears to have been subject to disastrous inundations, which we have supposed it was the merit of the great Yu to reduce and regulate. The floods are at present perpetually renewed in a greater or less degree, by the bursting, from time to time, of the banks and dikes of the Yellow River—a destructive, rather than a beneficial or useful stream, which, as already observed, the late emperor himself styled "China's sorrow." On reaching Nanking, and ascending the course of the Yangtse-keang, the country rapidly improves, the swamps disappear, and the shores consist of a bluish-gray compact limestone, under a layer of vegetable mould. The islands in the river, on the authority of Dr. Abel, are an agglomerate, composed of round and angular fragments of quartz, limestone, and felspar-porphyry, united by a thin argillaceous cement, or buried in sandstone. On reaching the Poyang lake, the mountains called Leu-shan, which border it on the northwest, were found to be composed of granite, containing milk-white felspar, gray quartz, and grayish-black mica. Occasionally appeared mica slate, but little quartz. Dr. Abel observes, "very large perfect crystals of felspar were found in the same place, many of them three or four inches in the largest diameter, and often conjoined with masses of mica in nearly equal dimensions."

At a short distance from the Poyang lake some

shallow pits were seen of a species of coal, which, from its imperfect carbonization and the evident traces of vegetable substance in its composition, resembled the Bovey coal of Devonshire. The alluvial character of the spot where the latter is found, bears some resemblance to the neighbourhood of the lake, which receives the drainings from the granite mountains in the neighbourhood. It has before been stated* that some of the materials of Chinese porcelain are obtained near the Poyang; and in this circumstance there is a further similitude, for it is observed by Dr. Kidd, "an inferior kind of porcelain earth is found in that part of Bovey in Devonshire, which is near the London road. It is met with not much below the surface of the earth; and, from a consideration of its situation and the attendant circumstances, appears evidently to be a natural deposition of earthy felspar. Whoever considers the swampy nature of that heath, the appearances observable on its surface, and its relative situation to the adjoining granite hills, may easily be convinced that it is derived from the detritus of these, washed down and deposited by water; for this heath is as it were a natural basin, which must necessarily receive whatever is brought down from the adjoining high ground; and its surface, in a great measure, consists of a white sandy quartz and occasional crystals and fragments of felspar, that evidently correspond with the quartz and unaltered felspar of the neighbouring granite."

On ascending the river Kan-keang, towards the Mei-ling ridge, the banks were observed to be composed of the old red sandstone resting on granite; and on reaching a point called *She-pa-tan*, or "the eighteen rapids," the rocks that obstructed the stream consisted of granite and a dark-coloured compact slate. The rapidity of the stream seemed to

* Chap. xvii., p. 238.

have worn away the superincumbent sandstone into a narrow channel that resembled a deep ravine, shaded by the pines that grew in the dark-red soil on either hand. From thence the acclivity quickly increases up to the pass through the ridge, of which the substance was examined, and found to consist of limestone, under an argillaceous sandstone of compact structure. The road was cut with much labour through the narrowest part, being not more than forty or fifty feet in length, as many in height, and about twenty broad. The rock was distinctly and horizontally stratified; the sandstone was small grained, its fresh fracture having almost the dark-gray colour of clay; but where long exposed to the weather it was reddish. On descending the southern side of the ridge, the road was lined with natural pyramidal heaps of limestone, which still preserved the remains of their original horizontal stratification.

Soon after passing the city of Nanheung-foo, at the foot of the ridge, Dr. Abel observes, that the hills which formed the banks of the river exhibited a breccial structure at their base, covered with beds of ferruginous clay, which gave to the soil a remarkable redness. Bricks were making of this, which came from the furnace of a blue colour, and such is the hue of all the Chinese bricks from Peking to Canton. Dr. Abel disproved, by experiment, the previous notion that the blue brick is only sun dried, and found that a portion of the red clay actually became of that tint by being subjected to the fire. In descending the river towards Canton, the embassies passed a cliff some hundred feet in height, which consisted of grayish-black transition limestone, containing deep fissures and natural caverns, some of which have been converted by a very little labour, into temples and adyta devoted to the goddess Kuan-yin. Over the front of the principal cavern hangs an enormous stalactite, formed by the

percolation of water, charged with carbonic acid, through the rock above.

The dark-gray marble used at Canton is of the coarsest grain, and unsusceptible of a fine polish.* In the shops abound large quantities of striated gypsum, or alabaster, which works very easily into small figures. This substance, after being converted by burning into plaster of Paris, is used in combination with oil as a cement for the seams of boats and junks. The Chinese turn it to various other purposes, honest and dishonest. It is sometimes used as a tooth powder; but the strangest application of it is as a *gruel* in fevers, under the idea of its being cooling. Perhaps the persuasion of the wholesome or at least innocuous qualities of powdered gypsum renders them less compunctous in using that substance to adulterate powdered sugar-candy, which it closely resembles; and we shall see, in a future chapter, that it serves as an ingredient in converting black teas, which come down damaged to Canton, into what is sold as *green*.

The coal at Canton is far from pure; it contains a small proportion of bitumen, abounds in sulphur, and leaves much earthy residuum. The coal mines by the river were observed to be in the sides of cliffs, rising directly from the waterside, and worked by drawing a level from the river into the side of the mine, the coal being laden in boats from the mouth of a horizontal shaft. The character given by Du Halde of the coal to the northward throughout the empire is much the same. He says, the fires made from it are difficult to light, but last a long time. He adds, that "it sometimes yields a disagreeable smell,

* There is one species, valued on account of the curious resemblance which the figures on its polished surface bear to trees, animals, &c. But this is said to come from Yun-nan. There is reason to suppose that the figures are sometimes artificial, from their too close resemblance to particular objects.

and would suffocate those sleeping near it, but for a vessel of water, which attracts the fumes, so that the fluid becomes charged with them." This may be the sulphuric acid, for which water has a strong affinity. There can be no doubt of the abundance of coal throughout China, nor of its extensive use; points which were both proved by the large supplies furnished to the boats of the embassy, and the heaps exposed for sale. The application of this mineral as fuel, so long ago as the end of the thirteenth century, is shown by the following accurate description of Marco Polo: He says, "there is found a sort of black stone, which they dig out of the mountains, where it runs in veins. When lighted it burns like charcoal, and retains the fire much better than wood; insomuch that it may be preserved during the night, and in the morning be found still burning. These stones do not flame, excepting a little when first lighted, but during their ignition give out a considerable heat."*

From the neighbourhood of Canton to the sea, the rocks are composed of red sandstone resting on granite, until, on reaching the clusters of islands that line the coast, these are found to consist of a coarse granite only, crossed by perpendicular veins of quartz. Over the irregular surfaces of the islands, and at the summits of the highest, are strewn immense rounded blocks of the same rock. They are generally imbedded in the coarse earth, which is a disintegration of the general substance of the islands, and, as this is washed from under them, roll down the steep declivities until they reach a level space, and commonly stud the sandy margins of the islands with a belt of piled rocks, some of them many tons in weight. The scenery of these islands has been often compared to that of the Hebrides, and is quite as barren. A single instance of trap formation was de-

* Quarto edition, page 273

tected by Dr. Abel, at an island called *Hong-Kong* which is distinguished by a waterfall; but many more would probably appear on further investigation.* "I examined," he says, "the rocks by the waterfall, and found them composed of basaltic trap, exhibiting in some places a distinct stratification, in others a confused columnar arrangement." Close to this was a mass, insulated by the sea water, composed of two kinds of rock, granite and basalt, whose junction exhibited some curious facts. A dike of basalt passes upward through the granite, and spreads over it. It is not in immediate contact with the granite, but separated by three narrow veins which interpose, and follow the dike through its whole length, the width of each not exceeding four inches, while that of the basalt is as many feet. The veins were of three kinds; first, granite and basalt mixed together in a confused manner; second, pure felspar; third, a sort of porphyry composed of very perfect crystals of felspar in a basaltic base.

No active volcano is known to exist in China; but the line of mountainous provinces which form the western side of the empire, from Yun-nan to near Peking, exhibits what are generally considered as slumbering volcanic symptoms, such as wells of petroleum, salt and hot water springs, gaseous exhalations, and occasionally severe shocks of earthquake. In Yun-nan there are salt-water wells near Yaou-gan-foo, in latitude 25° 35′; the southwest part of the adjoining province of Sze-chuen abounds in the same: in Shen-sy, near the city of Yen-gan-foo, in latitude 36° 40′, there is found petroleum; and in Shansy there are hot-water springs, as well as jets of inflammable gas, said to be employed for the purpose of distilling saline water procured from wells in the neighbourhood. This connection of

* Some islands near Chusan exhibit basaltic rocks.

the gaseous exhalations with saline springs has been considered as a corroboration of the fact, the same having been observed in Europe and America.* The Chinese are said to convey the gas to the place where it is consumed by bamboo pipes. These are terminated by a tube of clay to resist the action of the fire; and the combustion thus produced is so intense that the caldrons are rendered useless in a few months. A very severe and destructive earthquake occurred in Sze-chuen, during 1817, and another of the same description is remembered at Peking, as having happened in 1731. The slight shocks which have been only just perceived in the neighbourhood of Canton were probably nothing but distant vibrations, communicated from some portion of that line of active volcanoes which extends from the north-east extremity of Asia, through Japan, Loo-choo, Formosa, Luconia, and other islands, to Java.

We may conclude with noticing some of the principal minerals of China not already described. At the head of these must be placed the famous *Yu* stone, being nephrite or jade, of which was composed the *Joo-ee*, or emblem of amity, sent by the late emperor to the prince regent.

The colour is a grayish white, passing through intermediate grades into a dark green.† "It is semi-transparent and cloudy, fractures splintery, and is infusible without addition."‡ The country in which it is principally found is said to be Yun-nan, where they discover it in nodules within the beds of torrents. This stone is so extremely hard, that the Chinese, in cutting it, use their powder of corundum, sometimes called adamantine spar, as they do in cutting lenses for their spectacles from rock

* De la Beche, Geology, p. 132.

† A very large specimen may be seen at the British Museum, cut into the form of a tortoise, and found imbedded in the banks of the Jumna.

‡ Dr. Abel.

crystal.* The *corundum* is met with in granitic rocks, of which it is sometimes a component part. Its specific gravity is about four, and its hardness very great. From the subjoined analysis, stated in centesimal ratios by Dr. Kidd, it appears that the constituents of corundum, as well as its specific gravity, are nearly the same as those of *emery*, which is used for the like purpose by European lapidaries.†

Chinese corundum.		*Emery.*	
Alumine . . .	84.0	Alumine	80
Silex	6.5	Silex	3
Oxyde of Iron . .	7.5	Oxyde of Iron . .	4
		Residuum . . .	13
	98.0		100

As China abounds in the primitive rocks, it is consequently rich in metals. Gold is obtained chiefly in the native state from the sands of the rivers in Yun-nan and Sze-chuen, near the frontiers of the Burmese country, which is well known for the quantity of gold it produces. What is called the Kin-sha-keang, or "Gold-sand River," is a portion of the great Keang in the earlier part of its course; and the largest amount of the precious metal is said to come from Ly-keang-foo, near that river, and Yoong-chang-foo, on the borders of Ava. In Yun-nan also are worked silver mines; and indeed the great quantities of silver brought to Lintin for many years past, to be exchanged for opium and exported to India, have proved that there must be abundant sources in the empire, notwithstanding what has been said of the general prohibitions against such mining on the part of the government. Ordinary copper, whence the base metal coin of the country is made, comes from Yun-nan and Kuei-

* This is very abundant, and the best comes from Fokien

† Mineralogy, vol. i., p. 153

chow. A good deal of this is called *Tze-lae*, or "natural," as being found in the beds of torrents An abundance of *malachite*, or green copper ore, is obtained near the great lake in Hoo-kuang, and is pulverized by the Chinese for green paint. The famous *pe-tung*, or white copper, which takes a polish not unlike silver, is said to come exclusively from Yunnan. A considerable quantity of quicksilver is obtained in Kuei-chow; and there is a rich mine of tutenague, or zinc, in *Hoo-pe*.

CHAPTER XX.

AGRICULTURE AND STATISTICS.

Meteorology. — Annual Averages. — Typhoons. — Discouragements to Husbandry.—Objects of Cultivation.—Absence of Pasture.—Allotment of Wastes.—Manures.—Irrigation.—Rice fields.—Cheap Cultivation.—Population.—Encouragements to it.—Obstacles to Emigration.—Chinese Census.—Inconsistent accounts.—How to be reconciled.—Latest Census.—Positive Checks.—Land Tax.—Revenues partly in kind. Salt tax.—Public Expenditure.—Deficient Revenues.—Existing Abuses.

In connection with the subject of this chapter, it may be as well to make some general remarks on the climate and meteorology of such parts of the country as have come under the observation of Europeans. A distinguishing feature, the unusual *excess* in which heat and cold prevail in some parts of the empire at opposite seasons, as well as the low average of the thermometer round the year, in comparison with the latitude, has been already noticed* and explained as resulting, according to

* Vol. i., p. 125.

the investigations of Humboldt, from the position of China on the eastern side of a great continent. Although Peking is nearly a degree to the south of Naples—the latitude of the former place being 39° 54′, of the latter, 40° 50′—the mean temperature of Peking is only 54° of Fahrenheit, while that of Naples is 63°. But as the thermometer at the Chinese capital sinks much lower during winter than at Naples, so in summer does it rise somewhat higher; the rivers are said to be frozen for three or four months together, from December to March; while, during the last embassy in September, 1816, we experienced a heat of between ninety and one hundred degrees in the shade. Now it is well known that Naples and other countries in the extreme south of Europe are strangers to such a degree of long-continued cold, and not often visited by such heats. Europe, observes Humboldt, may be considered altogether as the western part of a great continent, and therefore subject to all the influence which causes the western sides of continents to be warmer than the eastern; and at the same time more temperate, or less subject to *excesses* of both heat and cold, but principally the latter.

The neighbourhood of Canton, and of other cities on the coast, to the sea causes this tendency to be greatly modified; and indeed the climate of the larger portion of the empire seems to be, upon the whole, less subject to extremes than that of the capital. Taking it all the year round, and with the exception of some oppressive heats from June to September, it may be questioned whether a much better climate exists anywhere than that of Canton and Macao; the former place being as low as latitude 23° 8′ north, and the latter about a degree to the south of it The mean annual temperature of those places is what commonly prevails in the 30th parallel. It is surprising to contrast their meteorological averages with those of Calcutta, a city which

stands very nearly in the same latitude. The following table was the result of observations made at Canton during a series of years: the average fall of rain was taken from a register kept, for sixteen years, by Mr. Beale at Macao :—

	Thermometer.					Mean Height of Barometer.	Average fall of Rain in Inches.	
	Mean Maximum.	Mean Minimum.	Mean Temperature	Range: From	Range: To			
January ..	57	45	51	65	29	30.23	0.675	
February .	58	45	51.5	68	33	30.12	1.700	
March ...	71	60	65.5	79	45	30.17	2.150	
April	76	69	72.5	84	59	30.04	5.675	
May.	78	73	75.5	86	69	29.89	11.850	
June ...	84	79	81.5	89	74	29.87	11.100	
July.	88	84	86	94	81	29.84	7.750	
August ..	86	83	84.5	90	79	29.86	9.900	
September	84	79	81.5	88	75	29.90	10.925	
October ..	76	70	73	85	60	30.04	5.500	Total Rain, 70.625
November	68	61	64.5	79	48	30.14	2.425	
December	63	52	57.5	69	40	30.25	0.975	
An. Means.	74.1	66.7	70.4	81.3	5.76	30.03		

Thus it appears that about 70½° of Farhenheit is the average temperature of Canton and Macao, and that the months of October and April give nearly the mean heat of the year. The total fall of rain varies greatly from one year to another, and has sometimes been known to reach ninety inches and upward. Vegetation is checked in the interval from November to February, not less by the *dryness* than by the *coldness* of the atmosphere; the three winter months being known sometimes to elapse with scarcely a drop of rain. The northeast monsoon, which commences about September, blows strongest during the above period, and begins to yield to the opposite

monsoon in March. About that time, the southerly winds come charged with the moisture which they have acquired in their passage over the sea through warm latitudes; and this moisture is suddenly condensed into thick fogs as it comes in contact with the land of China, which has been cooled down to a low temperature by the long-continued northerly winds. The latent heat given out, by the rapid distillation of this steam into fluid, produces the sudden advance of temperature which takes place about March; and its effect is immediately perceptible in the stimulus given to vegetation of all kinds, by this union of warmth with moisture.

With the progressive increase of heat and evaporation those rains commence, which tend so greatly to mitigate the effects of the sun's rays in tropical climates. In the month of May the fall of rain has been known to exceed twenty inches, being more than a fourth of all the year, and this keeps down the temperature to the moderate average marked for that month; while in Calcutta, there is no portion of the year more dreaded than May. At length the increasing altitude of the sun, which becomes just vertical at Canton about the solstice, and the accumulated heat of the earth, bring on the burning months of July, August, and September, which are the most oppressive and exhausting of the whole year. The extreme rarefaction of the atmosphere now begins to operate as one of the causes tending to the production of those terrible hurricanes, or rushes of wind, called typhoons, (*Tae-foong*—"great wind,") which are justly dreaded by the inhabitants of Southern China; but which chiefly devastate the coasts of Haenan, and do not extend much to the north of Canton.

The name typhoon, in itself a corruption of the Chinese term, bears a singular (though we must suppose an accidental) resemblance to the Greek τυφων. The Chinese sailors and boatmen have from

habit become very clever prognosticators of these hurricanes, and indeed of all kinds of weather, without the aid of the barometer. They have a common saying that "lightning in the *east* denotes fine weather —in the *west*, successive showers—in the *south*, continuous rain—in the *north*, violent wind." It is quite certain that typhoons always commence in the north quarter. The principal circumstances to be observed concerning these hurricanes are, the state of the barometer previous to and during the storm, the influence of the moon, and the localities in which they prevail. The barometer falls slowly for many hours, often a whole day, before the commencement, the mercury sometimes descending nearly to twenty-seven inches during the progress of the gale; and its rising is a sure sign of subsidence. Another sign of the approaching storm is the long and heavy swell which rolls in upon the seabeach, without any apparent cause, for some time before the hurricane begins; but which may perhaps be explained by so much of the usual pressure of the atmosphere (equal to two inches, or a fifteenth part of the mercurial column) being removed from the surface of the water; and this circumstance may likewise partly account for the overwhelming seas that are so much dreaded by the ships encountering the typhoons. The most likely periods for their occurrence are August and September, just at the change of the moon. The gale commences at north, goes about to east and south, and finishes at west. Typhoons seldom prevail below 10° north latitude, or above the parallel in which Canton lies; and their range west and east is from the shores of Cochin-China to 130° longitude.

About Haenan, and the strait which divides that large island from the main land, the typhoons are so dreadful, that temples are built expressly to deprecate them, and on the fifth day of the fifth moon the magistrates offer sacrifices. In addition

to the prognostics already noticed, they are preceded by a thick, muddy appearance of the atmosphere, and a show of unusual disquiet among the sea fowl. Thunder is considered as a symptom of mitigation. They seldom reach forty-eight hours, and their duration is commonly confined to twenty-four. In the year 1831, on or about the 21st September, a typhoon blew with unusual fury at Macao. It commenced at night; and by three or four o'clock in the afternoon of the following day the whole place was one scene of devastation, probably not unlike the ruin occasioned by the tornadoes in the West Indies. Houses were unroofed, ships stranded, and the solid granite quay in front of the town completely levelled. Great blocks of stone, some tons in weight, were carried a considerable way up acclivities, which might appear impossible, but for the fact, that the heaviest bodies are less ponderous in water than out of it, by the weight of the fluid they displace.

No small portion of the destruction occasioned by typhoons extends to the productions of agriculture and husbandry. The wind which blows from the south and east, being charged with salt water, has a withering effect on all the vegetation near the coast; trees are broken or rooted up; and rivers, already swelled by the summer rains, are driven in floods over the low lands which rice cultivation chiefly occupies. But, besides hurricanes and floods, other disasters attend on Chinese husbandry. Long-continued droughts are not unfrequent, assailing various portions of the empire by turns. The ravages of locusts are particularly dreaded in the north. Père Bouvet, in a journey from Peking to Canton during the year 1693, observed that "in Shantung the country was laid waste by a frightful multitude of grasshoppers, called from their colour *hoang-choong*, "the yellow insect." The air was full of them, and the earth covered in such a manner, even in the great roads, that our horses could not move

without raising clouds of them at every step. The insects had entirely destroyed the hopes of the harvest in this country: the mischief, however, did not extend far, for within a league of the place where this havoc was made, all was perfectly free." The plague of locusts is said to occur when great floods have been followed by a long drought.

These are some of the chief natural discouragements to agriculture in a country which possesses a large proportion of fertile lands, watered by the innumerable branches of those two great trunks, the Yellow River and the Keang. There is perhaps no point relating to China that has been more overstated, than the condition of its agriculture was by the early missionaries; probably in consequence of the contrast which it presented to the existing state of husbandry in Europe, at the time when they wrote. The opinion formed by Dr. Abel was, "that much as the Chinese may excel in obtaining abundant products from land naturally fertile, they are much behind some other nations in the art of improving that which is naturally barren." They exhibit, however, great perseverance and skill, about the neighborhood of Canton, in gaining muddy flats from the water by extensive and well-constructed embankments. The subject on which most exaggeration has prevailed is the system of terrace cultivation, which certainly exists in hilly districts, and may even be seen from the vessels at Whampoa, but is by no means carried to the marvellous extent that has been supposed. "While passing through the mountainous provinces of the empire, we naturally looked for that far-famed terrace cultivation which had led to the notion of China's being one vast garden, with hills terraced from the base to the summit. The wild and wooded tracts which were occasionally passed at length convinced us that they do not often attempt to cultivate a surface naturally sterile or difficult, except in the immediate vicinity

of towns; and that the terracing of hills is generally confined to those lower situations where an accumulation of their degraded surface affords a soil naturally productive."

The following is a summary view of the different sorts of cultivation observed by our embassies from Peking to Canton. Upon first landing on the shores of the Gulf of Pechely, the extensive alluvial flats along the river leading to the capital exhibited a dreary waste, with only occasional patches of cultivation, confined chiefly to the *holcus*, or tall millet, and small clumps of trees surrounding houses or temples. The banks of the river sometimes alone showed traces of tillage, and even these, where of a sandy nature, remained barren. This continued until we approached the immediate neighbourhood of Tien-tsin, which terminates the grand canal to the north, and between which city and the sea the whole country is nearly an unreclaimed marsh, the inhabitants bearing in their general appearance the proofs of its unhealthiness. This is, perhaps, the best safeguard from an invading force on the side of the coast. After passing Tien-tsin considerable improvement was observed towards Peking, and various additions to the number of cultivated plants. Besides the holcus, beans were grown, with the *sesamum orientale*, from which they extract an esculent oil, and the *ricinus communis*, or castor oil plant; but, above all, the *pe-tsae*, which is conveyed even to Canton. The trees comprised elms, willows, and a species of ash. The fields were not divided by any sort of hedge, but, as in every other part of the empire, by narrow ditches or drains, or by a ridge serving for a pathway.

When the travellers turned down the canal, on their way towards Canton, a great part of the land on both sides in Shantung had, as Mr. Ellis observed, "suffered so severely from inundation, that it was impossible to form a correct opinion of its usual

appearance." But the presence of the *nelumbium* argued its being generally swampy. On entering Keang-nan the country began to improve, and the northern parts of that province were highly fertile, being cultivated chiefly with rice and millet. In the neighbourhood of Nanking, the banks of the great river Keang were planted with groves of *thuya orientalis*, and with rice in flat alluvial patches. It was in this part of the country that the cotton shrub was first observed. In proceeding along the river towards Keang-sy and the lake, the cultivation of rice prevailed; but, on approaching the side of the lake, the country became hilly and wooded. It was here that the finest scenery commenced; for the whole of Keang-sy, from the Poyang lake to the Mei-ling pass, was more or less mountainous. The cultivation of this province in grain, vegetables, and sugar-canes, bore no proportion to the hills, which were either entirely barren or covered with plantations of the single white camellia, whose seeds afford the favourite vegetable oil of the Chinese. The shrub is generally from six to eight feet in height, bearing a profusion of large white single blossoms. "The hills over which it was spread," observes Dr. Abel, "looked in the distance as if lightly covered with snow, but on a nearer view they exhibited an immense garden." Their general bleakness and declivity unsuited them to the ordinary modes of culture, and the soil was of a red colour and of a sandy nature.

But, besides the camellia, other plants or trees of great utility and beauty were observed in Keang-sy, as the *croton*, whose berry supplies a vegetable tallow, fir and camphire trees, and the varnish shrub. As the stream of the river became most rapid towards its source, and the neighbourhood of the Mei-ling pass, those water wheels, already described at page 291, became numerous, for irrigating the sugar-cane plantations. On arriving at the ridge which

divides off the Canton province to the south, extensive woods appeared to cover both sides; and, from the pass itself to within two days' journey of Canton, we saw little else than a succession of sterile, but highly picturesque mountains. Down as far as Chaou-chow-foo the river was lined with barren limestone cliffs, their intervals were thickly wooded, but with little appearance of agriculture. From the latter place southward were red sandstone rocks, gradually flattening into an alluvial country, which, as it approached Canton, was cultivated richly with rice and fruit trees. *Below* the last city the river forms a great delta, the whole of which has been converted, by means of embankments, into an extensive level for the cultivation of rice. Out of this level are seen frequently to rise clusters of granite hills, like islands in a sea.

The foregoing describes the whole track of the embassy in 1816; but Lord Macartney's mission deviated at the point where the Keang is crossed by the canal; and, instead of proceeding up that great river to the northern extremity of the lake, they continued their course on the canal to Hang-chow-foo. Then, crossing the province of Che-keang, they entered Keang-sy to the east, and reached the lake at its southern end. In the course of this route they observed the cultivation of the Nanking cotton shrub, and the plantations of young mulberry trees for the nourishment of silkworms. Here also rice formed a principal item in farming; and the hills were planted with the useful trees and shrubs observed elsewhere. On approaching the neighbourhood of the lake from the east, the country consisted of swamps, the drainings from the hills, intersected by numerous branches of rivers; and the industry of the inhabitants was turned from agriculture to the business of fishing, as well as of entrapping the numerous varieties of wild fowl which there abound.

No good land is ever reserved in China for *pasture*, which in fact can scarcely be considered as forming a department of their husbandry. The few cattle that they have are turned out only upon waste lands, which are never improved by any sort of artificial manuring or dressing. To this must partly be ascribed the poor and stunted appearance of their cows and horses. The flesh of flocks and herds is scarcely tasted except by the rich, and no Chinese ever uses either milk, butter, or cheese. "Not only has it been the care of the government, from the earliest ages, to give every direct encouragement to tillage, and to the production of food for man alone, but there have always existed some absurd prejudices and maxims against an extended consumption of flesh food. The penal code denounces severe punishment against those who kill their own cattle without an express license.* It is a well-known principle that, where tillage exists to a considerable extent, the rent of land reserved for pasture must, in proportion to its goodness, be equal to that of land employed in producing grain;† and this, under a rice cultivation, where three crops per annum, or two of rice and one of vegetables, are said sometimes to be obtained, must have such an obvious effect in raising the comparative price of meat, as must discourage its consumption among a frugal people like the Chinese, even without the intervention of any positive law.

"There is accordingly no people in the world (the Hindoos excepted—and they use milk) that consumes so little meat, or so much fish and vegetable food; nor, again, is there any country in which fewer cattle are employed for the purposes of draft and burden. Where every institution tends to keep a population up to the very utmost limits of a bare

* Book iv., sect. 223.
† Wealth of Nations, book i., chap. 11.

subsistence, and where neither pride nor prejudice steps in between the labourer and his work, human exertion naturally supplants every other. In the southern parts of the empire, therefore, beasts of carriage and draft, with the exception of a few miserable riding horses and a few buffaloes for ploughing, are nearly unknown. Towards Peking, and the borders of Tartary, the case becomes altered; but the Great Wall may still be considered, generally, as the boundary that separates two people, one of them exclusively pastoral, and the other as exclusively tillers of the earth."*

The provincial government of Canton, in 1833, obtained the sanction of the emperor to a very sensible plan for inviting the poorest people to settle down on waste spots of land wherever they might find them, cultivating these in the best way they could for their own sole benefit, without any tax or other charge whatever. The land thus entered on might, hereafter, become liable to the land tax; but it was made the freehold property of the first cultivators, with a deed of grant from the government; and, as the object was the relief of the poor, no rich person was allowed to apply. The edict, by which the foregoing regulation was promulgated, observed, that "in government there is nothing so important as a sufficient supply of food for the people. * * If the poor people will but spend their strength on the southern lands, food and raiment will be supplied, and they will never be brought to abandonment and disgrace, nor become the associates of vagabond banditti. All those who sink down to depraved courses have been impelled to them, either by hunger and cold, or by voluntary laziness. In Canton province, thieves and robbers are exceedingly numerous, and they have no doubt originated in these causes. In attempting to eradicate their evil practices, the

* Royal Asiatic Transactions, vol. ii.

first thing is to provide them with the means of subsistence."*

Under all the circumstances, it is very surprising that the potato should have made so little progress as an article of cultivation and food since its first introduction at Canton. Nothing, indeed, could more convincingly demonstrate the strength of Chinese prejudices than their indifference to that, as well as to other European vegetables, as cabbages, peas, &c., which, with the potato, have been cultivated at Macao for half a century. The rice fields near that place are, during winter, converted to the growth of kitchen vegetables, including potatoes; but these are mainly for the supply of the European and native Portuguese population. Even the shipping near Canton is supplied with potatoes from Macao, where they are sufficiently abundant and cheap; but, at the former place, their use is not enough extended to have reduced their price. It is probable that from climate, soil, or other causes, joined to the ancient prejudice in its favour, rice will long continue to be preferred as an object of cultivation. The labour bestowed upon it is of a more compendious nature than that devoted to the growth of kitchen vegetables, and, in the southern parts of the empire, perhaps better repaid by the produce. In the case of everything except rice, the Chinese seem to manure rather the plant itself than the soil, supplying it copiously with their liquid preparation; and the motive to this is economy, for the heavy rains wash away all the soluble parts of the earth, leaving only a sterile mass of sand and stones.

Every substance convertible to manure is diligently husbanded. The cakes that remain after the expression of their vegetable oils, horns and bones reduced to powder, together with soot and ashes,

* Chinese Repository, vol. i., p. 503.

and the contents of common sewers are much used. The plaster of old kitchens, which in China have no chimneys, but an opening at the top, is much valued: so that they will sometimes put new plaster on a kitchen for the sake of the old. All sorts of hair are used as manure, and barbers' shavings are carefully appropriated to that purpose. The annual produce must be considerable, in a country where some hundred millions of heads are kept constantly shaved. Dung of all animals, but more especially night soil, is esteemed above all others; which appears from Columella to have been the case among the Romans. Being sometimes formed into cakes, it is dried in the sun, and in this state becomes an object of sale to farmers, who dilute it previous to use. They construct large cisterns or pits lined with lime plaster, as well as earthen tubs sunk in the ground, with straw over them to prevent evaporation, in which all kinds of vegetable and animal refuse are collected. These, being diluted with a sufficient quantity of liquid, are left to undergo the putrefactive fermentation, and then applied to the land. They correct hard water by the addition of quicklime, and are not ignorant of the uses of lime as a manure. "The Chinese husbandman," Sir George Staunton correctly observes,* "always steeps the seeds he intends to sow in liquid manure, until they swell, and germination begins to appear, which experience," he says, "has taught him will have the effect of hastening the growth of plants, as well as of defending them against the insects hidden in the ground in which the seeds were sown. Perhaps this method has preserved the Chinese turnips from the fly that is often fatal to their growth elsewhere. To the roots of plants and fruit trees the Chinese farmer applies liquid manure likewise, as contributing much towards forwarding their growth and vigour." With

* Embassy, vol. ii., p. 476.

regard to fruit trees, they have found that the best situations for planting them are by the sides of rivers. "Few situations," observes a paper in the Horticultural Transactions, "combine so many advantages for the planting of orchards or fruit trees, as low grounds that form banks of rivers. The alluvial soil, of which they are generally composed, being an intermixture of the richest and most soluble parts of the neighbouring lands, with a portion of animal and vegetable matter, affords an inexhaustible fund of nourishment for the growth of fruit trees."*

The sides of Chinese rivers are commonly high embankments of rich mud, thrown up as dikes for the protection of the lands which have in a great measure been gained from the river. These banks are six or eight feet in breadth at the top, five or six in height, and descend to the water at an inclination deviating about 30° from the perpendicular. The roots are in this manner *fed* by the water without being *swamped*, and the rich appearance of the fruit cultivation along the Canton river, in oranges, plantains, and other produce, seems to attest its efficiency: at the same time, the advantages of the system may be partly frustrated by the exposedness of such situations to plunder from passing boats, where there is a crowded population; and this may perhaps account in some measure for the perverse habit, which has been remarked in the Chinese, of plucking fruit before it is entirely ripe. The worst enemies of fruit cultivation near some parts of the south coast are the typhoons, which break and often entirely destroy the trees.

The highly ingenious mechanical contrivances, adopted under various circumstances for the irrigation of lands, have been already described in the eighteenth chapter. Occasionally a single bucket is used

Mode of Irrigation.

attached to the extremity of a long lever, which is nearly balanced and turns upon an upright, as may be observed in some parts of our own and various other countries. Where the elevation of the bank over which water is to be lifted is trifling, they sometimes adopt merely the following simple method. A light water-tight basket or bucket is held suspended on ropes between two men, who, by alternately tightening and relaxing the ropes by which they hold it

between them, give a certain swinging motion to the bucket, which first fills it with water and then empties it by a jerk on the higher level; the elastic spring which is in the bend of the ropes serving to diminish the labour. This mode of irrigation is represented in the annexed cut from Staunton.

The rice grown by the Chinese is of a much larger grain than that which is common in India, and consists principally of two sorts, the white, or finer, and the red, or coarser kinds. They have a great prejudice in favour of their own native produce; but, when this is scarce, are ready enough to purchase what comes from abroad. The Canton government encourages the importation of foreign rice by exempting the ships which bring it from port charges; but this advantage is in a great measure rendered nugatory by the dishonesty and exactions of the lower mandarins, which have sometimes caused ships to proceed no farther than Lintin, where the rice has been sold to coasting junks. At other times, however, this mode of avoiding a portion of the heavy expenses of the Canton river has occasioned an importation of from fifteen to twenty thousand tons in the ships of various nations—a small quantity, after all, for the demands of an enormous population. A considerable quantity of grain is used for fermented liquors and for distillation. The mandarins are such bad political economists as frequently to prohibit, when there are fears of scarcity, the appropriation of grain to these purposes; being ignorant that, if really required for food, the price would prevent its conversion to the other purpose; and, above all, that such a use of it always maintains a surplus supply, which may be resorted to in any case of extremity.

The plough used in rice cultivation is of the simplest construction. A sharp coulter or blade, in front of the share, is found needless, as the ground is of a light loamy description, and they never have

to cut through turf. The plough is, in some parts of the country, drawn through the soil by human strength; in others, by oxen, asses, and mules, yoked together indiscriminately. The ploughshare terminates at the back in a curve, which serves as a mould board to turn aside the earth. In the Canton province the soil of the rice fields is ploughed by means of a small buffalo, of a dark gray or slate colour, called by the Chinese *shuey-new*, "water ox," from its propensity for muddy shallows, where it wallows in the mire, with habits more allied to some of the pachydermatous than the ruminating tribes. When sufficient rain has fallen in spring to allow the rice fields to be laid under water, they are subjected to the plough in that condition, the buffalo and his driver wading through the wet and slime up to their knees—an operation to which the "water ox" is admirably fitted by nature. After this, a rake or harrow with a single row of teeth, and frequently a man standing on it, is dragged through the soil in order to break the lumps and clean the ground.

The rice is first of all sown in a small patch duly prepared and flooded with water, and subsequently transplanted to the fields where it is to grow. A short time previous to being sown, the seed is immersed in liquid manure, which promotes its future growth, and renders it less obnoxious to worms or insects. In two or three days after being committed to the ground, the young shoots appear, of a beautiful light-green colour, and when they have reached a proper height, they are removed to the fields which had been prepared for their reception. The process of transplanting, as observed in the Chinese Repository,* exhibits a division of labour that is perfect. One person takes up the shoots, about six inches in length, and hands them to another, who conveys them to their destination. They are there received

* Vol iii., p. 231

by another party of labourers, standing ankle deep in mud and water; some of whom dibble holes, into which they drop the plants by sixes, while others follow to settle the earth about the roots; the distances between these tufts being six or eight inches every way. The field is then kept flooded according to its wants, or to the circumstances of the season; and any unusual deficiency of water is of course fatal to a grain which, from its nature, the Americans of Carolina call "swamp seed."

The fields are weeded and otherwise attended to between seedtime and harvest; and when the rice, by turning yellow, is known to be nearly ripe, the water is gradually drawn off; so that, by the end of June or beginning of July, when it is time to reap, the fields are nearly dry. The tufts of grain are cut singly near the ground, by means of a species of sickle or crooked knife, and then carried off in bundles or sheaves to be thrashed. The floor employed for this purpose is of hardened earth, either with or without an admixture of lime. The grain has been said to be trodden out sometimes by cattle, but the most usual implement for thrashing is the common European flail. They have a winnowing machine precisely like ours, and there seems to be the best evidence for the fact, that we borrowed this useful invention from them.* To get rid of the tenacious husk of the rice, it is pounded in stone mortars, of which the cone-shaped pestles are worked by horizontal levers attached to them. A wheel moved by water turns a cylinder, to whose circumference are attached cogs which, meeting the extremities of the levers, strike them down alternately, and thus rise the pestles at the other end.

For the second crop of rice the ground is immediately cleaned of the old stubble and roots, and laid

* A model was carried from China to Holland; and from Holland the first specimen reached Leith.

again under water. Fresh plants are inserted as before, and the harvest is gathered in November. When other grains are sown, it is not by broadcast, but by the drill method, with a view to economizing the seed. One drill plough was observed by Mr. Barrow, different from the rest. "It consisted of two parallel poles of wood, shod at the lower extremities with iron to open the furrows; these poles were placed upon wheels; a small hopper was attached to each pole, to drop the seed into the furrows, which were covered with earth by a transverse piece of wood fixed behind, that just swept the surface of the ground." The third annual crop obtained from the land consists of pulse, greens, and other vegetables, obtained during the dry and cold winter months. At this period the rice fields near Macao produce an abundance of potatoes, peas, and cabbages, for which the Chinese summer in that latitude would be too hot and rainy. In lieu of a spade, they use a large heavy iron hoe, which is a more expeditious but far less efficient instrument, as it barely turns the earth to half the depth of the other. This hoe serves them instead of every variety of tool, for weeding, trenching, digging, or whatever may be the operation required.

The tendency, which has already been noticed in the Chinese institutions, to reduce tenements in general to a very small size, is probably one of the causes of the simple and economic processes that prevail in their husbandry. The cultivator being possessed of no superfluous capital, derives the most that he can from the soil by the cheapest method, and is lavish of nothing, except it be his labour. The land is never allowed to lie fallow, but its fertility is restored and maintained by an indefatigable system of tilth and manuring. This may serve partly to explain the diligence with which all putrescent substances are converted to this purpose, and especially the most disagreeable one, for which the Chi

nese are so noted. The extreme paucity of every species of cattle for purposes of either food or cultivation deprives them of the principal source of European fertilization, and at the same time suggests the substitute; to which may be added the circumstance of each tenement being in general a small patch of land immediately contiguous to the dwelling of the cultivator. But, independently of both manuring and fallowing, there appears to exist some ground for the opinion, that the absence of *both* expedients may be supplied to a considerable extent by repeated ploughings or exposures of the soil. The author has still in his possession a letter from the late Sir Joseph Banks, in which that distinguished person observed, with reference to a work on the agriculture of the Hindoos, as follows: "What astonishes me is, that no mention is made in any part of it of manures, or of any fertilizing process, except repeated ploughings, of which, in the case of sugar, a great many are said to be necessary. We find in Europe that repeated ploughings increase the fertility of the soil; but can it be that we, who seldom exceed four, are so ignorant as not to know that by a much greater quantity of labour the fertility may be proportionably increased?"

In what has already been said of the social and agricultural state of China, enough may perhaps have appeared to account, in some measure, for the very numerous population which that country unquestionably possesses, though the actual amount is a point not so easily to be ascertained. There certainly never has been known a people that held out so many direct encouragements to the growth of population, or so completely set at naught all those prudential restraints which have been proposed to us by Mr. Malthus. But it must be admitted that they pay the penalty in the shape of a great deal of consequent poverty and misery; clearly resulting from those parts of their system which tend constantly to in-

crease their numbers beyond the existing capability of the country to maintain them, and prevailing in spite of circumstances favourable to a general distribution of the means of subsistence. It may be as well to enumerate, in the first place, the principal causes which conduce to the unexampled population of China, and then to exhibit the different statements as to the actual amount.

We have already seen that the advantages with which the country has been gifted by nature, have been improved to the utmost by its industrious inhabitants, in the actual state of their knowledge and social condition; that agriculture, the scource of food, has been honoured and encouraged beyond every other pursuit; and that the culture of the land (even when divested of the exaggerations of early writers) and the nature of its produce, are such as to afford the largest return, under the circumstances, to the labour employed. It has been remarked, too, that the prevalence of agricultural over manufacturing occupations must tend to prolong life, as well as to increase food. Excepting those of the emperor in the vicinity of the capital, there are no extensive parks or pleasure grounds reserved from the operations of productive industry. In the prevailing absence of wheel carriages and horses, the least possible ground is occupied by roads; and the only tracts devoted to sepulchural purposes are the sides of barren hills and mountains. There is no meadow cultivation whatever; nothing is raised for the food of cattle, but all for man; and this is a more important circumstance than it may at first sight appear.

In China there exists, as we have observed, the smallest possible number of horses and of any animals for the purposes of labour, carriage or draft and these maintain themselves as they can on pastures unsusceptible of cultivation. Scarcely any domestic animals are kept unless for food. There is a very limited consumption of any kind of meat

among even the higher orders; and the lower subsist almost exclusively on the productions of tillage.* Now it has been calculated that, in Great Britain, above a million horses are engaged in transporting passengers and goods, and that the support of each horse requires as much land as would feed eight men. Here then are eight millions supplanted; and it is when this point has been reached, that the maintenance and use of horses becomes so comparatively costly as to give rise to inventions for superseding them, like steam carriages. In China, whatever cannot be transported by water is borne on men's shoulders, and the very boats on their canals are tracked by men.

In no other country, besides, is so much food derived from the waters. The missionaries, employed in constructing the map of the empire, observed that a large number of boats were collected from various parts on the Great Keang, at a particular period of the year, to procure the spawn of fish. A portion of the river being dammed up with mats and hurdles, the water becomes charged with the spawn, which is carried in vessels to distant places, and distributed wherever fish can subsist. Besides the ordinary contrivances of nets and wicker traps of all kinds, the Chinese have several modes of taking fish peculiarly their own. During moonlight nights they use long narrow boats, having wooden flaps at their sides, descending to the surface of the water at a particular inclination, and painted white. The fish being deceived by the light reflected from these boards leap upon them, and are turned over into the boat with a jerk. We have already had occasion to observe, that the innumerable fishing boats on the southern coasts maintain a race of hardy sailors, who have more than once, by their piratical combi-

* The present price of meat in England is about four times that of bread; or, where an acre of ploughed land will feed a given number of persons, it would require nearly four of pasture.

nations, given great trouble to the government, and were gained over at last only by concession. The vast quantities of fish which are caught are mostly salted, and thus consumed with rice. It is on the lakes and swamps of Shanting and Keang-nan that the fishing bird is trained to exercise his piscatorial habits in the service of man. Numbers of them were seen by our embassies perched in every boat, from which, at a given signal, they disperse themselves over the water and return regularly with their prey.

The political causes which tend to swell the population of China are numerous and powerful. Among these are the paternal rights which continue during life, and render a son, even in that over-peopled country, an important acquisition. How effectual and necessary male children are considered to the support of aged parents, is proved by the laws of the country, which grant life sometimes even to a condemned homicide, if the want of another son or grandson, above the age of sixteen, renders his existence necessary to the support of a parent. In some cases, the next nearest relative, as a nephew, may be reprieved from death under the same plea.* We have seen before that the power over children, is in reality absolute, and it appears that the original relation of the offspring to both their parents remains in full force, notwithstanding the divorce of the latter. The other cause which renders male children so desirable is the sentiment regarding sacrifices at the tombs, and in the temple of ancestors, on which the whole plot of one of their plays has been mentioned as turning. In default of male children, there is a legalized mode of adoption, by which the line is perpetuated and the family prevented from becoming extinct. Even the tendency of slavery to check population is counteracted by a

* Peking Gazettes. Royal Asiatic Trans., vol. i., p. 395.

law which makes the owners of domestic slaves, who do not procure husbands for their females, liable to prosecution.

But the perpetuation of families does not tend more to the density of the population, than the manner in which those families live and are maintained. It is a universal system of *clubbing* on the most economical plan. The emperor observes, in the Sacred Instructions, that nine generations once lived under the same roof, and that, "in the family of Chang-she, of Keang chow, *seven hundred* partook of the same daily repast. Thus ought all those, who are of the same name, to bear in remembrance their common ancestry and parentage. . . . . May your regard for your ancestors be manifested in your mutual love and affection; may you be like streams diverging from their sources, or trees branching from their stems." The claims of kindred being thus strengthened and enforced, and supported, besides, by common opinion, the property of families is made to maintain the greatest number possible; and even if any prudential scruples respecting marriage were supposed to exist in the mind of a Chinese, this would tend effectually to remove them.

Another political cause that aggravates the overpopulation of the country, is the obstacle that exists both in law and prejudice, to emigration. "All officers of government, soldiers and private citizens, who clandestinely proceed to sea to trade, or remove to foreign islands for the purpose of inhabiting and cultivating the same, shall be punished according to the law against communicating with rebels and enemies."* Necessity of course renders this in a great measure nugatory: but it must discourage emigration; because, even supposing a subject to have amassed a fortune in foreign countries, there is the clear letter of the law to hang perpetually over him on his re

* Penal Code, sec. ccxxv.

turn; and it is precisely in this way that all persecution and extortion in China is exercised—by quoting the law against a man. But, independently of this, the abandonment of his native place, and of the tombs of his ancestors, is always abhorrent to the mind of a Chinese; and the consequence is, that no persons but the most indigent or desperate ever quit their country.

In the general list of causes must not be omitted a very important one—the uninterrupted peace which has been enjoyed by this country since the complete establishment of the Manchow dynasty, a period now considerably exceeding a century. The depopulating effects of war are by no means to be measured or estimated alone by the numbers that actually die, for that loss would soon be repaired; but by the ruin and destruction of the funds for the support of existence, and the cessation of the occupations which produce those funds. At the Tartar conquest the waste of human life appears to have been almost beyond belief; but since that period the country has enjoyed a period of general tranquillity scarcely to be equalled even in Chinese annals. Two of the Manchow sovereigns were very extraordinary persons: their administration conferred a degree of prosperity on the empire which raised or restored it to its present condition, and increased its population, according to native accounts, at a rate which seems absolutely incredible, if measured by European calculations or experience. It is now time to exhibit the different statements on this subject—statements so vague and contradictory, that it does not appear easy to come to a very satisfactory result.

It seems clear that the native statistical accounts are, under any circumstances, and with all their defects, the only sources of information on which much dependance can be placed. Our two embassies bore witness to the countless numbers that came

under their observation on the route between Peking and Canton; but the provinces and districts through which both missions passed are confessedly the richest of the whole empire, and well known to excel, both in fertility and population, those to the westward. The grand canal and the Keang render them the great commercial route between the northern and southern provinces; and the British embassies drew together the whole population of the cities and neighbourhoods through which they travelled, the mandarins who attended them declaring that the crowd exceeded anything they themselves had before witnessed. The estimate of three hundred and thirty three millions, obtained from one of the conductors of Lord Macartney, is confessedly a document in *round numbers;* but, being declared to be founded on official returns, might at least be considered as an approximation to the truth, if the accounts derived by us, directly from their own statistical works, did not unfortunately discredit themselves by the contradictions and inconsistencies that pervade them.

Grosier, on the authority of Amiot, who quoted the *Ye-tung-chy*, or statistical account of the whole empire, made the population in 1743 amount to one hundred and ninety-eight or two hundred millions. There is nothing incredible in this, considering that the area included within the limits of China Proper is above eight times that of France. But on comparing it with the three hundred and thirty-three millions of Lord Macartney's authority, just fifty years afterward, an increase of considerably more than half within that period seems very large. The true point of difficulty is the degree of credit that is to be attached to the Chinese census. The division of the whole population into hundreds and tithings seems calculated to secure some degree of correctness in the returns; yet it has been stated, on native authority, that "the ordinary report of the population is a mere matter of form, to which no particular

attention is paid. When a census is especially called for by the emperor, the local officers just take the last one, and make a lumping addition to it, in order to please his majesty with the flattering idea of increase and prosperity. Now although it is true that the enormous census of three hundred and thirty-three millions was not made to impose on foreigners, yet it might have been made by this proud nation to impose on themselves."*

In a paper by Dr. Morrison, (appended to a report of the Anglo-Chinese College in 1829,) there is an account, obtained from a native work, of the functions of the board of revenue at Peking, which among other matters takes cognizance of the population. It appears that at the commencement of the present dynasty of Manchow emperors, and soon after their occupation of the country, a census was taken with reference to a poll tax, and a liability to military service, of all males above sixteen and under sixty years of age. The poll tax was afterward merged in the land tax, the census disregarded, and the poll tax for ever interdicted. The census was, however, afterward restored by Kien-loong, not with any view to taxation, but simply to ascertain the amount of numbers in each province and district, and this was to be taken by the heads of tens and of hundreds every three or five years. The first report was to the local magistrate, the next from him to the heads of the province, while these last transmitted the accounts to the supreme government. The avowed object of this census was to have some guide in apportioning government relief during periods of drought, inundation, and famine, to particular districts; as well as to aid the police in the execution of their duties.

When the census was taken by Kien-loong shortly previous to the embassy of Lord Macartney, that

* Letter in Chinese Repository, vol. i., p. 385.

emperor, in the fifty-eighth year of his reign, corresponding to 1793, issued a proclamation addressed to the whole empire, calling upon all ranks and conditions of men to economize the gifts of Heaven, and by industry to increase the quantity; for, observing the increase of population since the period of the conquest, he looks forward with deep concern to the future, when the numbers of the people shall have exceeded the means of subsistence. "The land," he says, "does not increase in quantity, although the people to be fed increase so rapidly." Here is the highest authority to prove, that a very great increase had really taken place; but when we come to the particulars, they are such as to stagger all belief. The emperor goes on to say, that in the forty-ninth year of Kang-hy, (A.D. 1710,) or under the old system of the poll tax, the population of the empire was rated at 23,312,200 and odd; and that by the late census, according to returns sent from all the provinces, it amounted to 307,467,200!

"The increase," observes Dr. Morrison, "seems so enormous in a period of about eighty-two years, that some error in the figures might be supposed. However, the emperor remarks that the increase had been about fifteen fold, which shows that there was no mistake; since fifteen-fold would make the amount three hundred and forty-five millions."* Dr. Morrison proceeds to say that "the statement proves Mr. Malthus's position, that population may double itself every twenty-five years, for this is nearly doubling it every twenty years." Indeed it proves a great deal too much, unless some way can be discovered of reconciling the account with bare possibility. But we must remember that a great portion of the country was *unsubdued* in the reign of Kang-hy. The southern parts of the empire held out ob-

* The increase, according to the number given is something more than thirteen fold.

stinately against the Tartars, and some of them were long governed by independent Chinese rulers. These, then, must of necessity have been, for the time, excluded from a census of the subjects of the Manchow dynasty. At the time when the numbering took place by order of Kien-loong, every portion of the present empire was united in peaceful subjection to his sway, and had, besides, enjoyed unusual peace and prosperity during his reign of extraordinary duration.

Again, we must call to mind that the census so remarkable for its small amount, under Kang-hy, was with reference to a *poll tax*, and to *military service*, two objects which were of all others the least calculated, during an unsettled and half-subdued state of the country, to ensure a correct or full return. It was long before the Chinese could get over their natural aversion to the Tartar dominion; and, for the first generation or two, it is likely that great numbers would seek refuge, either in some part of China still independent, or in some neighbouring countries or islands, as we have seen that they did in Formosa. The Manchow conquest is said, by the combined effects of war and emigration, to have reduced the population of China to less than half its amount under the *Ming* race; but the conquest has been followed by almost unexampled peace and prosperity during a period considerably exceeding a century; and this circumstance, in connection with those several parts of the Chinese system which we have already noticed as eminently favourable to increase, must have had its effect in peopling the country. The unrestrained march of population in its "geometric progression" is easily comprehended in a new country, like America, with plenty of fertile land; but in China it is necessary to explain an apparently sudden and extraordinary increase on particular and specific grounds.

A census said, on the authority of a Chinese sta-

tistieal work of some note, to have been taken in the seventeenth year of Keaking (1812) goes beyond the amount stated to Lord Macartney, and makes the population reach the number of 360,279,897. If the other is to be received, there is less difficulty in believing the increase that this last exhibits in nineteen years. It must be left to the reader's own judgment to determine how far the aeeuraey of a Chinese census is to be trusted, after he has been informed that the account is made up from the returns reeeived in detail from every village in the empire, in which the houses are provided with what is ealled a *mun-pae*, or "door tablet," on which are inscribed all the individuals of the family. The lists are transmitted through several channels before they reach Peking, and may occasionally, if not always, be liable to falsification by those who wish to flatter or gratify the court by the idea of increase. Taking the area of China at 1,200,000 square miles, we should, on the latest estimate, have three hundred inhabitants on a square mile, which is more than has been attributed to England or Holland.

Mr. Malthus, without seeming to have been aware of the disproportion between the census of Kang-hy and that of Kien-loong, appears disposed to credit the 333,000,000 stated to Lord Macartney as the aetual population of China at the end of the last eentury, on the ground of the extraordinary encouragements whieh are there given to the continual multiplication of the species. "The natural tendency," he observes, "to increase is everywhere so great, that it will generally be easy to aecount for the height at which the population is found in any country. The more difficult, as well as the more interesting part of the inquiry, is to trace the immediate causes whieh stop its further progress. The procreative power would, with as much facility, double in twenty-five years the population of China, as that of any of the states of Ameriea: but we know that

it cannot do this, from the palpable inability of the soil to support such an additional number." The great increase that has certainly taken place since the depopulating effect of the Tartar conquest (though likely in reality to be very different from the Chinese census) has been in some measure a mere restoration to the land of the population which it *before* maintained; in which respect the situation of the country has, to a certain degree, and for the time, resembled that of new colonies.

It is pretty generally admitted, that, as the preventive checks in any country operate feebly in restraining the overflow of population, the positive checks will be called into more powerful action; and in this respect China affords a signal corroboration of the Malthusian doctrine. We have seen that the poorest persons are urged to marriage equally with the richest, by motives inherent in their institutions, and sentiments instilled into them from their birth. The only classes among whom the preventive check operates at all, are the priests of Fo, on whom celibacy is enjoined by their tenets, and the domestic slaves, whom the interests of their masters may occasionally prevent from marrying—though in the latter case we have seen that the law has stepped in with its interference in favour of increase. The positive checks are epidemics, starvation,* and infanticide, as far as the latter prevails. The general healthiness of the country is remarkable; but the Peking Gazettes occasionally bear testimony to the ravages of sickness in particular districts, often the consequence of previous famine, whether resulting from drought, inundation, locusts, or other causes. The sacred edict warns the people against "those years which happen from time to time, when epidemic distempers, joined to a scarcity of grain, make *all places desolate*."

* The ordinary wages of labour appear, from the *Leu-lee*, to be equivalent to about sixpence a day.

The public granaries are very poor provisions against seasons of dearth, partly from the malversations and dishonesty of those who conduct them, and partly from their bringing the government into competition with the corn dealer or factor, whose natural interest is much better calculated to equalize the prices of grain, and make the plenty of one year supply the dearth of another, than the artificial interference of the government. When rice is cheap, he is prevented from buying and storing it up; and its very cheapness occasions its undue consumption; just as if a ship's company should eat up two months' provisions in one month. The free and unrestrained business of the corn factor would provide by far the best public granary, though it might deprive the government of some part of the paraphernalia and pretence of its paternal character. But the natural diffusion of food through *space* is equally restricted with its diffusion through *time*. As it is the policy of Chinese rulers to restrict the intercourse of different parts of the empire to inland navigation, a reference to the map will immediately show that the inland trade between some provinces on the coast is impeded by lofty mountains, where rivers take their rise, and where they are therefore innavigable. The plenty of one province, accordingly, in such a bulky commodity as grain, cannot easily supply the want of another except by *sea*; and that channel is interdicted.

This inconvenience is sometimes so plain as to be discerned, and to lead to the removal of the impediments. An edict was issued by the emperor about eight years since, of which the following is an extract: "The viceroy of the two provinces of Fokien and Che-keang has recommended a temporary relaxation of the restrictions on the coasting trade, and the holding out of encouragement to merchants to import grain from Che-keang by sea. In the past year, the harvest of rice in Fokien has been so

bad as to raise the price of grain to an unusual height. The same viceroy states that the harvest in Che-keang has been comparatively plentiful, and the coasting navigation affords such facilities for transmission, that he recommends some relaxation of the restrictions upon it, as an encouragement to merchants to supply the wants of the people. Let this be done according to his recommendation, and let the treasurer of Fokien hold out encouragement to the merchants of the provincial capital, and its dependancies, to proceed to Che-keang with proper licenses, and import grain by sea. Let the lieutenant governor of Che-keang make known to the merchants of his province, that if they wish to transmit grain to Fokien, they may receive permits from the treasurer for that purpose. Let them be allowed, after proper inspection, to proceed through the several seaports without detention or hinderance. When the price of grain in Fokien shall have sunk to its usual level, let the customary restrictions be resumed."

The impediments to free trade, in the produce of the land, arise partly from the principal revenues being derived from agriculture. A land tax has, from the earliest ages, been the chief resource of the government. We learn from the book of Mencius,* that in lieu of the present system, by which one tenth, or less, is levied from the land, a mode formerly prevailed, called *Tsoo*, (assistance,) by which the government obtained a ninth of the produce, or about eleven per cent. A certain portion of land was divided into nine equal parcels, of which one was reserved for the state, and the rest given to eight different farmers, who united in tilling the public field as a tax for their several portions.†

* Shang-meng, ch. v.

† An ode in their book of songs says, "Let the rain descend first on our public, and then on our private fields." The poet had perhaps charge of the finances.

This was considered as superior to all other systems, on the ground of its constant equality, and just proportion to the variations of the seasons; but it was of course found impracticable in the long run, and the mode of taxation called *Koong* substituted, by which an average of several years' produce was made, and a tenth of this fixed as a permanent tax. "But," says Mencius, "although in years of abundance the fixed rate is small, yet in bad years, when the produce is deficient, he, who should be the parent of the people, injures them by taking the average amount."

Some observations by Sir George Staunton, the translator of the penal code, in connection with the present subject, deserve to be quoted at length: "It has long been a disputed, and is still perhaps to be considered a doubtful question, whether the tenure, by which the land is in general held in China, is of the nature of a freehold, and vested in the landholder without limitation or control; or whether the sovereign is in fact the universal and exclusive proprietor of the soil, while the nominal landholder is, like the zemindar in India, no more than the steward or collector of his master. The truth probably lies, in this instance, between the two extremes. It is well known that several of the merchants who trade with Europeans at Canton have considerable landed possessions, and that they esteem those possessions to be the most secure, if not the most important portion of their property. The missionaries resident at Peking, under the protection of the court, had likewise their estates in land granted them by different emperors for the support of their establishments. Besides, the ordinary contribution of the landholder to the revenue is supposed not to exceed one tenth of the produce; a proportion very different from that which is required from the ryots, or actual cultivators of the soil in India, and which leaves enough in the hands of the landholder to en-

able him to reserve a considerable income to himself, after discharging the wages of the labourer and the interest of the capital employed upon the cultivation of his property. . . . . As there are no public funds in China, the purchase of land is the chief, if not the only mode of rendering capital productive with certainty and regularity, and free from the anxiety and risk of commercial adventure.

"On the other hand, it must be admitted that the penal code clearly evinces that there are considerable deductions to be made from the advantages just mentioned; that the proprietorship of the landholder is of a very qualified nature, and subject to a degree of interference and control on the part of government, not known or endured under the most despotic monarchies of Europe. By the 78th section (of the code) the proprietor of land seems to be almost entirely restricted from disposing of it by will. By the 88th section it appears that the inheritors must share it among them in certain established portions. By the 90th section, those lands are forfeited which the proprietors do not register in the public records of government, acknowledging themselves responsible for the payment of taxes upon them. Allotments of lands even appear to be in some cases liable to forfeiture, merely because they are not cultivated when capable of being so.* By the 95th section, no mortgage is lawful unless the mortgagee actually enters into the possession of the lands, has the produce thereof conveyed to him, and makes himself personally responsible for the payment of all taxes, until the lands are redeemed by the proprietor."† Thus the Chinese possess the benefits of a *public registry of real property*, which was established with a view to securing to the emperor his revenues from the lands.

* But we have seen that they are sometimes given free of taxes, and with no other condition than that of cultivation.

† Appendix to *Leu-lee*, p. 526.

We have seen that the capitation or poll tax imposed by the Tartars was soon taken off again; and it was Yoong-ching, the second emperor of the dynasty, who, in order to avoid the trouble and uncertainty attending the collection of the land tax from the tenants, ordained that it should ever after be taken from the land owners. In order to comprehend in any way the subject of the Chinese revenues, we must premise, that from the produce of taxation in each province the treasurer of that province deducts the civil and military expenses, and all outlays, whether for public works or otherwise, remitting the *surplus* to Peking either in money or kind. The difficulty, then, of ascertaining the real expense that attends the administration of the whole empire arises from this surplus being the only point that has been clearly ascertained; as well as from a considerable portion of the taxation being levied in *commodities*, as grain, salt, silks, and stores of different kinds. Whether this cumbrous and wasteful system arose from the want of a convenient circulating medium, (in the absence of any gold or silver coin,) or from some other cause, we will not pretend to explain; but it is deserving of remark that no small part of the allowances of public servants, especially at Peking, as well as of the stipends of courtiers and imperial relatives, is paid in the shape of *rations* and *supplies*. Without possessing, as it would seem, the means of an exact computation, Du Halde states that the total expense of the imperial government through the empire must be two hundred millions of taels, or upward of sixty millions sterling, of which only *twelve millions* are transmitted to Peking. The accuracy of the latter amount seems pretty nearly confirmed by what appeared in a Peking Gazette, dated November, 1833. A Tartar officer therein states, that the whole receipts from land tax, salt monopoly, customs and duties, &c., do not exceed forty millions of taels. This is twelve or thirteen

millions sterling, and can of course mean *only* the revenue transmitted to Peking, after paying the expenses of the provinces; for a country eight times the size of France could hardly be governed for that sum. Again, it appears from a statement by Dr. Morrison, that the surplus from land tax transmitted to Peking by *two* provinces was *five* millions of taels, which, taken as an average for eighteen provinces, would give forty-five millions; but one or two of them supply much below that average, and the true total may therefore be forty millions, as above.

With reference to the grain that is transmitted to the capital, Padre Serra informs us, that it is laden in about ten thousand boats, each boat carrying eleven hundred sacks. In addition to the independence of sea navigation, it was for the express purpose of securing this supply that the grand canal was constructed. One of its names is the "Grain-remitting River;" (Yun-leang-ho;) and the statement extracted by Dr. Morrison, from a Chinese account of the board of revenue at Peking, confirms the foregoing assertion of Padre Serra; for the actual number of grain junks is there reckoned at 10,455. On quitting *Tien-tsin* in 1816, and proceeding towards the capital, the vast number of these vessels ranged along the southern bank of the river drew our attention. From about noon until late at night we sailed rapidly past an unbroken line of them, anchored in a regular manner with their heads to the shore, and close to each other; the stern of every junk resting upon the side of the one immediately next to it down the stream. Each of them was said to carry above a hundred tons; but this must probably be beyond the average of their burden, since it would give the enormous amount of more than a million tons in grain. It is likely that some of them are employed not exclusively in remitting grain, but that the silks, teas, and other tribute from the provinces are likewise laden on board. Tien-tsin is only about fifty

miles from the sea; and an invading enemy, by reaching that point, might either take possession of the grain junks, or destroy them, and thus starve the capital.

It is a rule on the canal, that all private vessels should make way for the grain junks, and the people in the latter sometimes abuse their privilege. "The late outrageous and violent conduct of those on board the grain junks (said an edict of the present emperor in 1824) towards private merchants and individuals, has rendered it necessary to enact certain regulations for their future government and control. The superintendent has reported that it has been the custom for every division of these vessels to employ the people of the province and district whence it came, as being the best skilled in the management of the vessels. This has given occasion to numbers of houseless vagabonds from distant parts to conduct themselves in a disorderly and unlawful manner, relying upon their great number for impunity. Let the head man in each vessel be made responsible, and let him be compelled to return lists of his crew, as a check upon their conduct. Let the returns contain a description of the age, appearance, and other particulars of each person; and let every man have a badge or mark round his middle, in order that, when the vessel comes to anchor, he may be duly registered. When the grain junks enter any particular district, let the civil and military officers, attended by their soldiers and followers, resort to the spot, and exert themselves in quickening the progress of the vessels, as well as in the preservation of order."* A portion of the land tax in grain is reserved in each province for the supply of the public granaries, to be sold at a reduced rate to the people in times of scarcity.

Another principal source of revenue in China,

* Asiatic Transactions, &c., vol. i.

next to the land tax, is the duty on *salt*, which yields a very large amount, in consequence of the immense consumption of salted fish, as well as other provisions. The trade in salt is a government monopoly, farmed by a certain number of licensed merchants, who, in point of wealth, vie with those other monopolists, the Hong merchants of Canton. This necessary of life is chiefly procured in the eastern and southern provinces on the coast, though they appear to have mines of rock salt, as well as salt springs. Large square fields in the marshes adjoining the sea are made perfectly level, with elevated margins. The sea water is then either let in by sluices, or pumped in by the method commonly used in irrigation. The water, which lies on the surface to the depth of a few inches, is then evaporated by the heat of the sun. The huge stacks, or rather *hills*, of salt, observed by our embassies at Tien-tsin, were calculated by Mr. Barrow* to contain 600,000,000 lbs., and occupied the north side of the river, or that opposite to the grain junks; but these lay *above* the city, while the heaps of salt bags lay *below* it on the river. We find from Marco Polo, that a like revenue was derived by the Mongol emperors from this necessary of life.

In China no considerable quantity of salt can ever be removed except by a permit. There appear, from the penal code, to be similar restrictions attending

* "The number of entire stacks was two hundred and twenty-two, besides several others that were incomplete. A transverse section of each stack was found to contain seventy bags. None of these stacks were less in length than two hundred feet; some extended to six hundred. Supposing the mean or average length of those stacks to be four hundred feet, of which each bag occupied a space of two feet, there would then be in each stack two hundred sections, or fourteen thousand bags, and in the two hundred and twenty-two stacks upward of three millions of bags of salt. Every bag contained about two hundred pounds weight of salt, and consequently, altogether, six hundred millions of pounds in weight of that article."

certain government monopolies of both tea and alum* for home consumption. "Whoever is guilty of a clandestine sale of these articles shall be liable to the same penalties as in a clandestine sale of salt."† Ginseng is another monopoly of the emperor. The collection of this root in Manchow Tartary is confined to the "eight banners," each division having a portion of territory allotted to it for the search of the medical treasure. That collected at Ningkoota used to be reserved for the sole use of the emperor and his family, the rest being distributed in rewards to officers and courtiers. Tickets or permits are given to those employed in the collection, and severe punishments enacted against all such as presume to gather ginseng without license. The Hong merchants have been *compelled* to buy ginseng to the extent of 120,000 taels per annum. Several mines of metals also afford a revenue. In Yun-nan is a river called *Kin-sha*, or "golden sanded," some part of the produce of which is paid to the government.

Taxes on the transit of goods are another source of income to the emperor, as well as customs on imports and exports. A considerable addition to the prices of teas, exported by us from Canton, is made by the duties levied by the government at different passes between that port and the countries where it is grown. This is one of their main reasons for confining the European ships to Canton; for if *we* obtained the teas nearer to the places of growth and manufacture, all that was saved in the price to the purchasers would be lost in the transit duty to the revenue. Besides these burdens, and the profits of the Hong merchants, are to be reckoned the regular and irregular charges made by the hoppo, or chief commissioner of customs. This officer is always a

* It has been observed before, that alum is used as a precipitate in clarifying the water of the rivers for use.

† Penal Code, sec. cxli.

Tartar favourite of the emperor, selected from one of the three tribes about the court; and as many of them are distinguished by their *number* and not by their *name*, a former hoppo of Canton (in 1828) was styled "His Excellency *Seventy-four*." It is the business of the hoppo, in addition to amassing an immense private fortune from the European trade in the course of four or five years, to remit to Peking annually 1,470,000 taels, or Chinese ounces of silver, and to make three presents to the emperor; one in the fifth moon, another on his majesty's birthday, and a third at the end of the year.* The whole amount to about 800,000 taels in value, and consist principally of European articles obtained from the merchants. As the *foreigners* are those who ultimately pay these charges, the government has none of its ordinary scruples to restrain exaction.

The civil and statistical work† abstracted by Dr. Morrison, after stating all the sources of income, proceeds to give the items of expenditure. It begins with the salaries and allowances in silver, grain, and silk, to the princes and nobles about the court, which have already been noticed in the tenth chapter.‡ The officers of government receive both pay and allowances, the pay being often a mere trifle, but the allowances on a liberal scale. The legal emoluments of the governor of a province are 15,000 taels, or 5000*l*., in silver, the value of which is much higher with them than with us. The treasurer of a province, who collects and remits the land tax, &c., has 9,000 taels. After paying the court, the civil service, and the army, the board of revenue has to issue relief to those districts of the empire which have suffered from draught, inundation, locusts, or earthquakes. The various sources of regular income appear to be

* Padre Serra's Notices, Royal Asiatic Transactions, vol iii., 4to.

† *Ta-tsing Hoey-tien*. ‡ Vol i., p. 369.

inadequate to the necessities of the state, and hence the need of resorting to unacknowledged fees and assessments. "His present majesty on his accession," observes Dr. Morrison, "ordered all fees to be discontinued; but he did so by the advice of a novice. All the governors of provinces immediately memorialized, and declared the orders utterly impracticable. The emperor then turned round, confessed his inexperience, censured his adviser, and revoked the order."

It has been observed before, that the Tartar soldiers are paid, in part, by grants of land. In western Tartary parties of military, of 800 or 1,000, are settled down to cultivate the waste lands, serving at the same time to control the native population. They generally produce grain enough for their own subsistence. Soong-ta-jin (the conductor of Lord Macartney) recommended that each man should have a piece of land given him as a perpetual inheritance; but the government objected, on the ground that he would neglect martial exercises to cultivate his private farm; and that region (they added) was too important to intrust to undisciplined troops. The Chinese troops settled towards the Russian frontier, from the Saghalian westward, are generally agriculturists. To a station on that river some criminals were sent, to be coerced by the regular troops, and to work for them. They behaved well, and the Emperor *Yoong-ching* (the third of the Manchows) forgave their crimes, and granted them lands. He remarked on that occasion, "It may be seen from this occurrence that if criminals have a path of self-renovation opened to them, there is reason to hope they will reform their vices and become moral."

Some mode of increasing its regular income has of late attracted the serious attention of the government of China. In a Peking gazette,* dated the

* Chinese Repository, vol. ii., p. 430

11th October, 1833, there appeared the result of de liberations between the several supreme boards and that particular one which has especial charge of the revenue. They had formed a committee of ways and means, and the object was to increase the income for current expenses, because, during the last few years, the outlay had exceeded the receipts by more than thirty millions of taels. They were, in short, employed upon the great secret of government, which has been thus defined: "à prendre le plus d'argent qu'on peut à une grande partie des citoyens, pour le donner à une autre partie." The defalcation is attributed, and with apparent reason, to the suppression of two rebellions among the Mohammedan Tartars, adherents of Jehanghir Khojah, and to the inroads of the Meaou-tse, northwest of Canton. But, besides these sources of expense, there has been an unprecedented train of calamities in the shape of deluge and drought, making it necessary to remit large amounts of land tax in different provinces; while the repairs of the Yellow River, and its neighbouring streams, drained both the general and provincial treasuries. Expense was thus increased, at the same time that income was diminished.

The expedient that has been adopted for raising money, being directly contrary to what may be termed the leading principle of the Chinese system, that of eligibility to office by learning and talent alone, may perhaps be considered as boding ill to the present rulers of the country. The rank of *Kiu-jin*, which qualifies for employment, and, by a fundamental law of the country, should be attainable by no other road than that of approved learning, has been lately *sold for money*, as offices in France were under the old regime. But so opposed is this to the universal sentiment of the empire, and to the expectations of the proper candidates for employment, that a short limit is set to the period of its exercise. On the occasion in question, the term was restricted to

about nine months. The system is considered altogether bad. Many of the old purchasers remain unemployed; and those who get into office, having bought their places, deem it but fair to repay themselves as fast as possible from the people. Various other expedients have been proposed; some were for opening the mines; some advised raising the price of salt; others recommended that rich merchants and monopolists should subscribe for the wants of the state. It has been already mentioned, that one or two of the Hong merchants obtained the decoration of the peacock's feather for contributing a round sum towards the military operations against the mountaineers. The present government of the country is evidently hard pressed for means, and would be distressed by any unusual draft upon its resources.

Although, as we have before endeavoured to demonstrate, the very different condition of China, in respect to wealth and prosperity, argues a system of government much superior to what prevails under other Asiatic despotisms; although, as long as we are to judge the tree by its fruits, a large share of good government *must* be the general rule; it is evident that the rule is not without its exceptions. The emperor—the theoretical father of his people—does not find it so easy *openly* to impose new taxes as his necessities may require them; and his power, although absolute in name, is limited in reality by the endurance of the people, and by the laws of necessity. Our own country has proved the fact of the largest amount of direct taxation being levied under a limited monarchy, and through the delegates of the people themselves; and the English House of Commons has done a great deal more than the Emperor of China could probably *attempt* with safety. He is therefore obliged to a certain extent, and on particular occasions, to let functionaries pay *themselves*—the worst possible form of taxation. The real amount, levied in this manner from the people,

becomes greater than the nominal, and the excess is incalculably more mischievous than if fairly and directly obtained. In reference to this system and its consequences, the Chinese have a saying, that "the greater fish eat the smaller; the smaller eat the shrimps; and the shrimps are obliged to eat mud." It may be presumed that the expulsion of the Tartars is the only likely way to a remedy.

CHAPTER XXI.

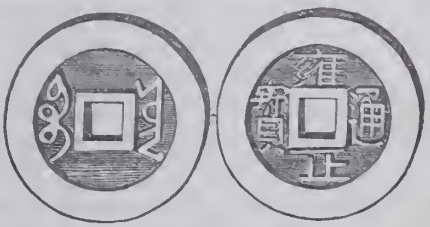
COMMERCE.

Coin of Base Metal.—Value compared with Silver—which passes by Weight.—Ancient Paper Currency.—Pawnbroking.—Interest of Money.—Internal Commerce.—Disadvantages of Canton for English Trade.—Origin of Hong Merchants.—Heavy Expenses of Foreign Shipping.—System of Smuggling.—Opium the chief Import.—Its Consumption.—New Law against it.—Totals of British Trade.—Black Teas described.—Green Teas.—Preparation of Tea.—Spurious Green Teas.—Mode of Colouring.—Growth of English Tea Trade.—Chinese Ports and Harbours.—Eligible Ports for Trade.

The government of China issues no other coin than the base metal *Tchen*, composed of copper and zinc, with perhaps some lead, and in value considerably less than the tenth part of a penny.* On one side is the title of the reigning emperor, with two words denoting "current value," while the reverse bears a Tartar inscription. In the centre of each of

* It appears that the white shells called *couries* have been, and perhaps still are, in use as a medium of exchange about the provinces bordering on India and Ava, particularly Yun-nan. They are called by the Chinese *hae-fei*, "fat of the sea," and three of them seem to have been exchanged for one copper coin.

these coins is a square hole, through which they are strung together by hundreds, and in this state look something like strings of sausages. Many years ago, a specimen of a single coin having by some chance been dropped in an unfrequented part of the United Kingdom, the person who picked it up carried the mystery to a learned antiquary, who having written a long essay on the subject, in which every conjecture was hazarded but the true one, a representation of the strange coin, with the essay appended, was published in a standard work of some eminence. With a view to diminish the chance of such a mistake for the future, a fac-simile of the coinage of one of the Manchow emperors is here given :—



The curious, as in other countries, make collections of the ancient copper coin, in order of succession of the reigns under which they were issued. It is said, however, that there are fabricators of these, as well as of numerous other antiques, of which the Chinese are so fond. A series, mounting up beyond the Christian era, has been brought to England; and if a string of *tchen* taken at hazard be examined, it will often be found to contain some coins of an ancient date. During former periods of Chinese history, money seems to have been made of other materials besides copper, being coined into a great variety of shapes, with symbolical figures of various animals. So greatly has the current coin of the

reigning dynasty been debased, compared with its nominal value, that the greatest difficulty is experienced in repressing the practice of forging it. In the Peking Gazette for June, 1824, there is the confession of a convicted forger, who declares that, "being in great want, he, in concert with a former acquaintance, agreed on a plan for counterfeiting old worn-out *tchen*, by casting lead, which being smuggled into circulation, they were to share the profits. They procured a stone and made a mould for the coin, and their instruments being ready, they hired an empty apartment attached to a temple, and there coined upward of 7,000 tchen; but, soon after putting these in circulation, they were seized with all their tools."

In the same year there appeared a curious paper from the Viceroy of Fokien to the emperor, being "A report concerning the depreciation of the current *tchen* in comparison with silver bullion, requesting the imperial assent to a temporary suspension of the coinage, with a view to prevent needless waste. In the provincial mint (for it seems there is one in each province) the average coinage of ten days had been 1200 strings of *tchen*, (each string containing 1,000, or ten divisions of 100 each,) and therefore the total coinage of one year averaged 43,200 strings; (or 43,200,000 *tchen*;) the use of which had been to pay the militia of the province. In order to procure the copper and zinc required for coinage, officers had been regularly deputed to Yun-nan and Hoo-pe: and 't was calculatad that the expenses of transmission and coinage, added to the cost of the metal, had amounted, on an average, to 1 tael and 261 parts (in silver) for every 1,000 *tchen*. But the present market value of fine silver, in exchange for the coin, was only 1 tael weight for 1,240 *tchen*; this difference being added to the above, the total disadvantage amounted to more than 500 parts in each tael, and the annual loss in the province to 20,000 taels." To understand this, it must be observed that 1,000 *tchen*

ought to purchase or represent 1 tael of fine silver, but that more than 1,500 were now required for that purpose, including the first cost of the coin to the government.

The viceroy then alludes to an inconvenience arising from the bulk of the base metal coin in comparison with its value; in which respect it somewhat resembles the iron money of Sparta. "The province of Fokien," observes the Chinese functionary, "being on the borders of the sea, its distance from some other provinces is great; and the merchants who resort hither with their goods, finding it inconvenient to carry back such a weight of coin, exchange it for silver as a more portable remittance; in consequence of which silver and copper coin have become very disproportionate in their relative values; the former rising, and the latter falling to an unusual degree. It has always been the rule," he adds, "to pay the militia in coin, at the rate of 1,000 for a tael of silver; but now, a tael of silver in the market being worth 1,240 *tchen*, they experience a serious loss from this when they exchange their coin for silver, with a view to a more ready transmission of their pay to a distance." The remedy proposed by the viceroy was, that the mint should be shut, and all further coinage suspended; the militia receiving their pay in silver, until the relative values of silver and *tchen* approached nearer to a par.

The only coin of the country being copper, it follows that all transactions, beyond mere daily marketing and the lowest class of payments, must be carried on by a *weight* of silver, of which the tael expresses one Chinese ounce, divided decimally into 10 *mace*, (in the language of Canton,) which are still further divided into 10 *candareens*—the names of weights and not coins; so that 10 copper *tchen* should, in exchange, equal 1 *candareen* of silver; 100 should equal 1 *mace;* and 1,000 should pass for 1 tael; though, from the paper before quoted, it

seems the exchange *varies* between copper and silver. It has appeared impossible to establish a silver coin in the country, from the unconquerable propensity of the people to play tricks with anything more valuable than their base copper money: indeed we have seen that they forge even *that*. On the introduction of Spanish dollars in commerce, they were at first found to be so convenient, that the coinage of dollars in imitation was for a time allowed; but, though these commenced at a higher rate than the foreign dollars, they soon sank greatly below the standard, while the foreign coin preserved its wonted degree of purity.* The manufacture of imitation dollars, being now prohibited, is still carried on to a considerable extent. Some are alloyed with lead, while others are made of base metal and coated with silver. The Spanish dollars imported at Canton, very soon become punched into such a state, with the private marks of all those through whose hands they pass, as to be saleable only by weight. The fraudulent Chinese even introduce bits of lead into the punch-holes, and none but freshly imported dollars can ever be received but with a very strict examination, called shroffing.

The smallest payments in the interior, if not made in the copper *tchen*, are effected by exchanging bits of silver, whose weight is ascertained by a little ivory balance, on the principle of the steelyard. The astonishing inconvenience of such a system might have been expected to lead to a silver coinage; but it still continues, and in this want of a circulating medium may perhaps be sought the real cause of so much being effected by barter, as well as of the payment of a considerable portion of taxes and rents, and other obligations, in produce, instead of money. Those payments to government, which are not made in kind, are in silver of a prescribed

* Chinese Commercial Guide, p. 64.

rate of fineness This is cast in stamped ingots of one and ten taels in weight, of which ninety-eight parts in one hundred must be of pure silver, the alloy being therefore only two per cent. The *Sysee*, as it is called at Canton, paid in exchange for opium, and sent home in considerable quantities to this country, is of the same description of bullion; and as it was found, on assay at the bank, to contain a considerable admixture of gold, which the Chinese had not been able to detect or separate, it has proved very profitable to the importers, raising the premium on *Sysee* in China to five or six per cent. With the imperfect means that exist there of ascertaining the real quantity of the bar silver received in exchange for opium, it is only surprising it should have turned out *above* rather than *below* the stipulated value.

Besides the inferior grade of pawnbrokers, there are in every considerable town a respectable class of what are called "money shops," approaching in some degree to our private banking establishments. Officers charged with the collection of the revenue deposite with these the receipts on account of taxes and duties; and the money shop is paid by a liberal allowance for waste, in melting and reducing the silver to the quality of government *Sysee*, for the purity of which it is responsible. "Taxes are generally handed over to them by the government; mercantile duties are frequently paid into their banks by the merchants from whom they are owing; and the banker in such case gives the merchant a receipt for the amount, accompanied by a certificate that it shall be paid to government within a certain period. The refined silver is cast into ingots, and stamped with the name of the banker and date of refining. Should any deception be afterward discovered, at whatever distance of time, the refiner is liable to severe punishment. . . . . From private individuals these banks receive either deposites drawable at will, in which case no interest is allowed, or

they take money at interest not exceeding twelve per cent., in which case some days' notice must be given before any portion can be withdrawn. They do not appear to differ materially in any respect from similar establishments in Europe; but there are no chartered or privileged banking companies. Paper money has formerly been issued by the government, but is not now known."*

Allusion was made in the first chapter† to the paper money issued by the Mongol conquerors of China, as mentioned by the Arabian traveller, Ibn Batuta, who states that all the silver coin had vanished from the circulation, and been melted down, in consequence of the depreciation which took place in the paper from over-issues. Marco Polo gives the following distinct account of the same paper money: "In the city of Kambalu is the mint of the Grand Khan, who may be said to possess the secret of the alchymists, as he has the art of producing money by the following process: He causes the bark to be stripped from those mulberry trees, the leaves of which are used for feeding silkworms, and takes from it that thin inner rind which lies between the coarser bark and the wood of the tree. This, being steeped and afterward pounded in a mortar, until reduced to a pulp, is made into paper, resembling that which is manufactured from cotton, but much darker. When ready for use, he has it cut into pieces of money of different sizes, nearly square, but somewhat longer than they are wide. Of these, the smallest pass for a denier tournois; the next for a Venetian groat; others for two, five, and ten groats; others for one, two, three, and as far as ten *besants* of gold. The coinage of this paper money is authenticated with as much form and ceremony as if it were actually of pure gold or silver; for to each note a number of officers, specially appointed, not only sub-

* Chinese Commercial Guide, p. 66. † Vol p. 22

scribe their names, but affix their signets also, and, when this has been regularly done by the whole of them, the principal officer deputed by his majesty, having dipped into vermilion* the royal seal committed to his custody, stamps with it the piece of paper, so that the form of the seal tinged with the vermilion remains impressed upon it; by which it receives authenticity as current money, and the act of counterfeiting it is punished as a capital offence.

"When thus coined in large quantities, this paper currency is circulated in every part of his majesty's dominions, nor dares any person at the peril of his life refuse to accept it in payment. All his subjects receive it without hesitation, because, wherever their business may call them, they can dispose of it again in the purchase of merchandise they may have occasion for. . . . . When any persons happen to be possessed of paper money, which from long use has become damaged, they carry it to the mint, where, upon the payment of only three per cent., they may receive fresh notes in exchange. Should any be desirous of procuring gold or silver for the purposes of manufacture, such as of drinking cups, girdles, or other articles wrought of these metals, they in like manner apply at the mint, and for their paper obtain the bullion they require. All his majesty's armies are paid with this currency, which is to them of the same value as if it were gold or silver. Upon these grounds it may certainly be affirmed that the Grand Khan has a more extensive command of treasure than any other sovereign in the universe."† When Marco wrote, it is probable that the abuse of the system had not taken place, and that the paper money still retained its credit.

The shops of pawnbrokers are at present very numerous in China, but they are under strict regula-

* This is exactly the mode of sealing at the present day.

† Marsden's edition, p. 353.

tions, and any one acting without a license is liable to severe punishment. The usual period allowed for the redemption of the pawned goods is three years, and this, being compulsory on them by law, is said to be injurious, as the pledges must often lose their value by the length of time. The highest legal rate of interest on deposites is three per cent. per month; but, in winter months, the money advanced on wearing apparel may not exceed two per cent., on the alleged ground that poor persons may be able the more easily to redeem. These pawnshops have the usual effect at Canton, of affording facilities to thieving; and it is only surprising that native servants have been there found so generally honest under all the circumstances. The Chinese principle of *responsibility*, however, comes into play, and becomes the more necessary on account of the facility of escape beyond the reach of any European. No native servant is hired by prudent persons without being *secured*, that is, without some trustworthy individual being responsible for him; and so perfectly familiar and habitual is this to all, that they recognise the obligation in its fullest extent, and violate it less often than might be expected.

The legal limit to the rate of interest is three per cent. per mensem, and thirty per cent. per annum; but this of course is very seldom reached, except in pawning, and other such short loans. Whatever number of years may have elapsed, the government does not enforce any claim for interest accumulated above the amount of the principal, or in Chinese phrase, "the offspring must not be greater than the mother,"* and all compound interest is unlawful. The ordinary rate of interest at Canton is from twelve to fifteen per cent., which alone seems very high, and must be ascribed to the scarcity of large

* This idea is not peculiar to China: "Que de *filles*, O Dieu, mes piéces de monnoie ont produites! Voyez, la plupart sont déjà aussi grandes que leurs *mères*."

capitalists in a country where the subdivision of property is carried so far; as well as to the general insecurity of loans. Where the nature of private credit is not very good, the system of lending on *pledges* prevails more generally, as it does in China, and pawnbroking ascends much higher in the scale of the community; just as Lombard-street was once composed of pawnbrokers' shops. According to the *Mémoirs sur les Chinois*,* the motive of the government, in legalizing such a high rate of interest as that above stated, is "partly to facilitate loans, and partly to discourage luxury and prodigality by hastening the ruin of such as borrow merely to spend."

Sir George Staunton, in a note to his translation of the Chinese law of usury, accounts in the following manner for the high limit fixed by the code: "The rate of interest upon a pecuniary loan must, generally speaking, be influenced by a twofold consideration. Besides what is considered to be strictly equivalent to the advantage arising from the use of the money, the lender must be supposed, in most cases, to receive likewise a certain compensation for the risk to which he exposes his principal. The former consideration will always be limited by, and bear a certain ratio to, the peculiar state and degree of the general prosperity of the country; but the latter can evidently be determined by no rule of proportion which does not include the consideration of the relative situation and circumstances of the parties interested in the transaction. In England, indeed, where the security of property and the exclusive rights of individuals are so well understood and so effectually protected by the laws, it may in general be almost as easy to guard against risk as to compensate for it. But in China, where the rights connected with property are comparatively vague and undefined, and, being distinct from the source

* Vol iv., p. 299

of power and influence, are less the object of the law's regard—where, owing to the subdivision of property, there are few great capitalists—and where also there is but little individual confidence, except between relations, who, holding their patrimony in some degree in common, can scarcely be considered as borrowers or lenders in the eye of the law—it is not so surprising that it should be deemed expedient to license in pecuniary transactions the insertion of stipulations for very ample interest; and, in point of fact, there is no doubt that the law in this respect, indulgent as it is, is frequently infringed upon.

"In a state of things so unfavourable to the accumulation and transfer of property, there cannot at any time be much floating capital; and the value of that capital, as far as it is denoted by the interest which it bears, it is natural to expect will be high in proportion to its scarcity: in other words, where there are many borrowers and few lenders, and where it forms no part of the system of government to grant to the former any peculiar degree of protection or encouragement, it seems a necessary consequence that the latter will both demand and obtain a more than ordinary compensation in return for the use of their property. Trade, therefore, as far as it requires such aid, cannot be so extensively carried on as it is in those countries in which, there being more available capital, that capital is procurable at a cheaper rate, and accordingly a smaller return of profit is found adequate to the charges of commercial adventure."

The *internal* trade of a vast country like China, governed on such exclusive principles, must of course constitute the principal part of its commerce. The European trade at Canton is almost nothing when compared with the extent of the empire, and the amount of its population; and the foreign intercourse that is carried on in native junks is limited by the imperfections of nautical science and skill.

as well as by the unfitness of the vessels themselves, and the discouragement to all external adventure. The visits of the junks to neighbouring countries do not extend beyond Japan to the north, the Luconian islands to the east, Batavia to the south, and the Straits of Malacca to the west. To Japan they sail in June and July, taking their departure from Ningpo and Amoy, laden with silk piece goods, chinaware, and sugar, together with drugs, as rhubarb and ginseng; to which is added the sandal wood imported before from India and the South Sea Islands, in English and American ships. To Luconia they take a variety of goods, bringing back nothing but rice or dollars. Between China and Batavia, a junk never sails either way except in the favourable monsoon, quitting its own shores in February or March, and returning in July. The exports are tea, chinaware, and drugs of various kinds, in return for what is called at Canton "Straits' produce," as areca nut, ratans, edible bird's nests, pepper, &c. Within a late period, a considerable trade in junks has originated with Sincapore, interfering probably with that formerly carried on with Batavia.

It has been remarked, that raw produce of all kinds has generally found a better market in China than foreign manufactured goods. Those laws which forbid the use of things not sanctioned by custom, added to the usual pride and self-sufficiency of the people, are a bar in most cases to the extended consumption of European manufactures. It is enacted in the penal code, that "the houses, apartments, vehicles, dress, furniture, and other articles used by the officers of government, and by the people in general, shall be conformable to established rules."* The translator observes in a note: "It is certain that, generally speaking, the pleasure which the possessor of superior wealth may be supposed to derive from the display of it, a Chinese, whatever his situation, is

* *Leu-lee*, sec. 175.

in a great measure, if not wholly, prevented from en joying." It is rather in the necessaries than the su perfluities of life that they generally deal, and that great variety of climate within the empire, which makes the northern and southern provinces dependant on each other for supplies, renders the whole country at the same time independent of foreigners. The south provides the great staple of rice, as well as sugar; the east furnishes silk, cotton, and tea; the west, metals and minerals; and the north, furs, and a variety of drugs whose growth is unsuited to a warmer climate.

The transit duties on this internal commerce afford a very considerable revenue to the government, and were perhaps first suggested by the expense of constructing the grand canal. They now extend to nearly all articles of consumption, and it has been calculated that the addition made to the price of tea, at Canton, by government charges, as well as by the long and laborious carriage from the provinces where it is grown, (but from which we are interdicted,) amounts to 150,000*l.* on black teas alone. The labour and expense of transport, independently of the duties, may be gathered from the description of the difficulties encountered by the boats of the embassy of 1793, in passing up the river towards the frontier pass of Che-keang province. "After seven days of tedious navigation," says Barrow, "if dragging by main strength over a pebbly bottom, on which the boats were constantly aground, and against a rapid stream, could be so called, we came to its source near the city of Chang-shan Hien." The same difficulties are experienced up the other stream, in Keang-sy, towards the Mei-ling pass. As we ascended the river in 1816, files of men stood with large iron hoes on each side of the boats, scraping a channel for them through the pebbly bottom.

"We are confined at Canton," it has been observed, "to a single port of a single province—that single

province divided from the rest of the empire by a barrier of high mountains, and chosen purposely by the Chinese government as the point farthest distant from the capital. In order to be consumed at Peking, where the coldness of the climate would render them most useful, our woollens must travel a distance of 1,200 miles, and cross the mountainous barrier, at the foot of which they are unladen from boats and carried on men's shoulders across the pass called Mei-ling. The consequence is, that only one ninth of our woollen exports is consumed in the northern provinces, including the capital, as proved by Mr. Ball, who after much minute inquiry demonstrated the advantages that might accrue to our trade, could the Chinese government be persuaded to admit us to a port farther north, and nearer to the tea provinces. He has clearly proved, what might always have been surmised, that Canton, from its geographical situation is 'of all other ports the most unfavourable to European trade.' Our metals, as they will not bear the expense of transport, are almost entirely consumed in the province where they are landed; and hence their very limited amount." But the expense of carriage is only a part of the disadvantage, for to that must be added the government dues. "It is not to be supposed," as Mr. Ball observes, "that any reduction can be effected in the transport duties. The Chinese are unlikely to grant privileges to foreigners which necessarily entail a loss on themselves."*

The policy of the Tartar dynasty, in having been the first to confine the European trade with such obstinacy to a point so unsuited to its extension, may be explained on two grounds; first, the desire to remove the danger of external involvements from the vicinity of the capital; secondly, as above, to derive the largest possible revenue from internal transit The direct annual revenue accruing from

* Quarterly Review, vol. xlii., p. 153.

Canton has been ascertained to exceed 1,200,000 taels on *imports* alone; but this bears no proportion to other gains, of an indirect nature.* Contributions are exacted from the Hong merchants under various names, as "Uses of the army," "Yellow River," "Imperial tribute," &c.: and the *Consoo* fund, at first intended as a provision for defraying the debts of bankrupt Hongs, is a rich source of revenue to the Chinese, as well as a heavy loss to our own trade; besides which, the inferior offices of the customs at Canton, being farmed out, are necessarily maintained by irregular charges on European commerce.

As the Consoo fund owed its origin to the particular constitution of that set of monopolists called Hong merchants, it is proper to observe, that this body and their privileges have originated as much in the peculiar policy of the government, as in the cupidity of the individuals themselves. The pride and jealousy of the rulers of the country have kept them studiously aloof from a direct intercourse with foreigners, finding it most convenient to throw the trouble and responsibility of managing persons of whom they stand in great fear and dislike, on sub-

* The true way to estimate the importance of the Canton trade to the Chinese, is rather by the quantity of tea exported, than by that of imports from abroad. Were the forty or fifty millions of pounds weight annually taken away, of an article into whose manufacture human labour enters so largely, thrown back on their hands, the consequences would be disastrous. We must include, besides, all the labour and capital employed in transporting it by land from a distance of five or six hundred miles. Yet the exclusion of *one* European nation would make no difference to the Chinese with respect to the effectual demand for their tea, since there would be *others* ready to take it up immediately. The Americans themselves would be happy to become carriers for us; and, accordingly, there is no danger of our being shut out from the *supply* of that article, even in the event of a rupture with China: the loss would consist in the suspended employment of British capital and commercial shipping.

ordinate delegates, and to practise their impositions through this inferior channel. The Hongs consist at present of eleven individuals, of very different degrees of wealth and character; they do not form a joint stock company, but are licensed to trade individually; although the whole body was, until the year 1830, liable for all the foreign debts of each member. This liability was then very much relaxed, as it was found that such a responsibility on the part of the body had given to the poorer members a degree of credit, and a facility in obtaining loans from Europeans, which had been the principal cause of the numerous bankruptcies, either real or fraudulent, among the indigent or improvident Hongs.

The Consoo fund, whence such large sums have been drawn, in the liquidation of debts incurred by ruined or dishonest merchants, is derived from charges amounting to about three per cent., laid by the body of Hong merchants on foreign exports and imports; and hence it becomes a severe burden on the fair trade of Canton. Instead of being allowed to terminate with the liquidation of the debts for which they were first levied, it seems that these charges have continued in full force, and served to meet the increased demands of the government on the Consoo. Under these circumstances there can be no room for surprise at the pertinacity with which the provincial authorities support a monopoly so profitable and convenient to themselves; and by means of which they can benefit at the expense of Europeans, without coming into direct collision with a race who are not disposed to accord those acts of deference and homage so grateful to the pride of Chinese rulers.

But, in addition to the duties levied, the port charges and other expenses attending shipping in the rivers are extremely heavy. The routine of a vessel's arrival, and her preliminary arrangements may be shortly stated. On nearing the coast from

the southward, the Landrones, two small but lofty islands, are first made. A point lying southeast of Macao, called *Cabrita* by the Portuguese, is then passed; and off the town is an exposed anchorage of from three to four fathoms. Ships send their boats ashore at Macao for a Chinese pilot, who is not often procured until the next morning; and therefore, when the weather is bad, vessels run up at once to Lintin for shelter. The charts, constructed at the charge of the East India Company, afford ample directions for piloting a ship to Whampoa: and the pilots are only fishermen, employed by those who understand nothing of the business themselves, but who take out a government license, and who thus enjoy a monopoly in return for the responsibilities which they incur; for, if a ship misbehaves, the pilot is bambooed. Without a pilot, no merchantman is allowed to pass the batteries at the entrance of the river: the pilotage inward is sixty dollars, and the same outward, or about 30*l.* in all.

On anchoring at Whampoa, about ten miles below Canton, two boats from the officers of the local authorities hook on astern of each ship. It is their business to act as spies on the vessel, and to prevent smuggling and other illegalities. A comprador or purveyor of provisions is generally hired; but a fee of fifty dollars is in any case paid, to meet the extortions of the mandarins. It is stated in the "Chinese Commercial Guide," that when a shipmaster or supercargo does not hire a factory at Canton, the further sum of ninety-six dollars must be disbursed, to pay the demand of the custom-house people for a house comprador.*. In some cases this is paid by the *security* merchant of the ship, and he finds means of reimbursing himself, in his transactions with the agent or master of the vessel. This security merchant must be one of the Hongists, who is held re-

* Page 15.

sponsible for the payment of all fees and duties connected with the ship, as well as for the conduct of every European or other foreigner on board.

Another functionary remains to be mentioned under the name of *linguist*, who seems to be so called rather on account of the absence, than the presence, of those accomplishments which are usually implied by the term; for these persons cannot write English at all, and speak it scarce intelligibly. The linguists, (observes the Commercial Guide,) like the Hong merchants, are obliged to pay largely for their licenses, and are besides liable to heavy exactions, chiefly from the underlings of office, as the Hong merchants are the prey of the higher officers. They also have the same difficulty in obtaining leave to retire from business, though in a less degree. The Hong merchants are required to be sureties for the linguists, before the latter can obtain their licenses. The business of the linguists is to procure permits for delivering or shipping cargo, to transact all affairs with the custom house, and to keep accounts of the duties and port charges; and every ship is compelled to pay 173 dollars, or about 40*l*., as a fee to its own linguist. Some time after reaching Whampoa, each vessel is *measured* by the hoppo's officers, for the levying of the port charges. On a ship of eight hundred and fifty tons, these charges, in addition to the various disbursements above stated, amount altogether to nearly 5,000 dollars, or between 800 and 1,000*l*. sterling!

It is clear that such heavy exactions must hold out the strongest inducements to all ships, but especially small ones, on which they fall the heaviest, to evade them if possible; and to the influence of this cause, joined to the contraband nature of the opium trade, is to be ascribed the rapid growth of the smuggling depôt at Lintin, which commenced about the year 1822. As if to give an additional

impulse to the increase of this smuggling station, the Chinese government, in consequence of the scarcity of rice in 1825, enacted that ships bringing rice, and *no other goods*, should be exempted from the port-charges at Whampoa. Vessels accordingly now station themselves at Lintin, below the mouth of the river, laden with rice, which they sell in sufficient quantities to other vessels, newly arrived, to exempt them from those port charges; while the real cargoes are either left at Lintin to be smuggled in, or put on board other ships which fill themselves up entirely on freight for Whampoa. It is clear that this extraordinary advantage, in favour of rice, must operate against the importation of foreign manufactures in fair trade.

It was observed at Canton, soon after the commencement of this strange system, that "if the illegal commerce should continue to increase, through the abilities of the natives as smugglers, and the extreme corruption of the lowest custom-house officers, whose duty it is to put them down, there is every probability that the illicit traffic in this country will arrive at a height to interfere most materially with the revenues derived from foreign trade, and the emoluments which the government have previously obtained from it. Cargoes are now constantly carried down in ships from Whampoa to other ships, at an appointed rendezvous among the islands, where the goods are transhipped, and all port charges thus evaded by the vessel which receives them. Under any other than the existing system, (in 1826,) it may be supposed that the trade to China would become nearly a smuggling traffic altogether, until the government of the country were compelled to resort to extreme measures for the protection of its own interests." Since the opening of the trade, the experiment has begun to have a fair trial. The provincial authorities in 1834 betrayed considerable alarm at the increase of the

smuggling system at Lintin, and this alarm was no doubt founded, first, in the evils arising from the lawless, independent, and violent habits which such a system engenders; and, secondly, in the prospect of a decrease or annihilation of the revenue derived from the fair trade.

The Chinese Commercial Guide printed about that time observes, "The opening of the China trade to British shipping will probably, so long as the present vexatious restrictions continue in force at Whampoa, lead to such an increased amount of general trade at Lintin, as to require depôts for other goods besides opium. Such goods are now brought to Lintin by vessels not entering the port; and by vessels which, to avoid the measurement and other charges, enter as *rice ships*. These goods are variously disposed of, some being sold to the native smugglers outside, and some brought to Whampoa in other foreign vessels." It is the universal corruption of the government officers of Canton, in the article of opium, that makes it so difficult to stop the rest of the contraband trade near that port. On other parts of the coast, the attempts to smuggle have not often been successful. The Commercial Guide observes, "that the control of the government over the people is too oppressive to permit them to run the risk of purchasing except where they can obtain large profits. Hence *opium* is chiefly in demand; while even rice, though carried to the thickly peopled and almost barren districts of the coast of Fokien, has never found a ready or remunerating market."

The progress of time alone can show if greater success is to be expected, in the attempts to introduce European manufactures on the east coast, than has attended recent experiments. The late Dr. Morrison observed, as far back as 1823, that "the opening of any ports to the north (eastward) for the resort of European ships, is not a likely occurrence

while the present rulers of China reign. They will not even allow tea to be carried coastwise to the south, from the ports near to the places of growth, lest the traders should carry their cargoes to European ships or ports, and so deprive government of the revenue arising from the inland carriage; but most of all, lest a 'traitorous intercourse' with Europeans should be opened, and the tea get into the possession of the English without passing through the Canton custom house." The vessels, which lately attempted to trade on the coast to the northeastward, in spite of the hostility of the government, have found nothing to succeed except *opium*, and even that could only be sold in moderate quantities.

In the experimental voyage of the *Amherst*, we have before seen that, after a cruise of six or seven months along the whole coast, even to the neighbourhood of Peking, nearly the entire quantity of the few articles shipped were brought back as they went. Experiments were soon afterward made by private individuals in imitation of the company. A small vessel sold some opium in 1832, and proceeded as far as a port in Fokien. The supercargo in vain sought some channel of trade; his views were frustrated by the vigilance of the government. He observed, on his return, through the local newspaper of Canton, "My mind is made up that, until some important change in the relations of the two countries takes place, the only chance of pushing English manufactures on that coast is by having them as a small item in an opium cargo." Another small vessel proceeded up to the Yellow Sea, and even touched on the coast of Tartary, but her endeavours to trade were generally fruitless. A Mr. Gordon, who was despatched from Bengal to procure tea plants from the neighbourhood of the provinces where they are cultivated, saw a great deal of the attempts to trade on the coast; and he was of opin-

tion that, without the consent of the Chinese government, any prospect of an advantageous or creditable intercourse did not exist.

The engrossing taste of all ranks and degrees in China for *opium*, a drug whose importation has of late years exceeded the aggregate value of every other English import combined, deserves some particular notice, especially in connection with the revenues of British India, of which it forms an important item. The use of this pernicious narcotic has become as extensive as the increasing demand for it was rapid from the first. The contraband trade (for opium has always been prohibited as hurtful to the health and morals of the people) was originally at Macao; but we have already seen that the Portuguese of that place, by their short-sighted rapacity, drove it to the island of Lintin, where the opium is kept stored in armed ships, and delivered to the Chinese smugglers by written orders from Canton, on the sales being concluded, and the money paid, at that place. From the following statement it will be seen that, while the quantity imported into China has increased more than five fold, the average price has fallen to about one half:—

Year.	Chests.		Dollars.	Total dollars.
1821 . . .	4,628	average price	1,325 . . .	6,132,100
1825 . . .	9,621	" "	723 . . .	6,955,983
1830 . . .	18,760	" "	587 . . .	11,012,120
1832 . . .	23,670	" "	648 . . .	15,338,160

This had, at length, the effect of drawing the serious attention of the Peking government to the growing evil, and it seems certain that the aggregate value of the importation, which in 1832 exceeded the enormous amount of 15,000,000 dollars, or between three and four millions sterling, has since diminished. From the original MS. translation of a Chinese state paper, the following abstract may be interesting. A late memorial to the emperor

from one of the censors laid open the evil in all its deformity, and showed its prevalence among the officers of government—"I have learned," says he, "that those who smoke opium, and eventually become its victims, have a periodical longing for it, which can only be assuaged by the application of the drug at the regular time. If they cannot obtain it when that daily period arrives, their limbs become debilitated, a discharge of rheum takes place from the eyes and nose, and they are altogether unequal to any exertion; but, with a few whiffs, their spirits and strength are immediately restored in a surprising manner. Thus opium becomes, to opium-smokers, their very life; and, when they are seized and brought before magistrates, they will sooner suffer a severe chastisement than inform against those who sell it.

"The local officers sometimes receive bribes to connive at the practice, or they are induced in the same way to desist from a commenced prosecution. The greater number of traders, who carry about Canton goods for sale, smuggle opium with them; and when the magistrates seize opium-smokers, these declare they cannot identify the persons from whom they bought the drug. It is my humble opinion, that the injury done by opium is twice as great as that which results from gambling; therefore the offence of smoking it should not be more lightly punished than the other. Now the law provides that gamblers shall declare where they obtained their gaming utensils, and unless they inform against the sellers, they shall be considered as accomplices, and punished with a hundred blows, and three years' transportation. Every convicted gambler must be punished, under any circumstances, with eighty blows, and, if he be an official person, his punishment shall be increased one degree. But the opium-smoker, who will not inform against the seller, is simply pilloried and beaten for his own crime. I

have therefore to propose the enactment, that all convicted opium-smokers, who declare that they do not know the names of the sellers, shall be considered as accomplices with them; and that, if the offenders be mandarins, or their dependants, they shall be punished one degree more severely. Thus may the severity of the law deter from the practice: the habitual smokers will not dare to persevere, and others will not venture to imitate their example.

"It seems that opium is almost entirely imported from abroad; worthless subordinates in offices, and nefarious traders, first introduced the abuse; young persons of family, wealthy citizens and merchants, adopted the custom; until at last it reached the common people. I have learned on inquiry, from scholars and official persons, that opium-smokers exist in all the provinces, but the larger proportion of these are to be found in the government offices; and that it would be a fallacy to suppose that there are not smokers among all ranks of civil and military officers, below the station of provincial governors and their deputies. The magistrates of districts issue proclamations, interdicting the clandestine sale of opium, at the same time that their kindred, and clerks, and servants smoke it as before. Then the nefarious traders make a pretext of the interdict for raising the price. The police, influenced by the people in the public offices, become the secret purchasers of opium, instead of labouring for its suppression; and thus all interdicts and regulations become vain."

The censor then recommended the following regulation to be passed, which, having been considered and approved by the Criminal Board, was confirmed by the emperor, and published in 1833 as the amended law upon the subject:—

"Let the buyers and smokers of opium be punished with one hundred blows, and pilloried for two months. Then let them declare the seller's name,

that he may be seized and punished; and, in default of this declaration, let the smoker be punished, as an accomplice of the seller, with a hundred blows and three years' banishment. Let mandarins and their dependants, who buy and smoke opium, be punished one degree more severely than others: and let governors and lieutenant governors of provinces, as well as the magistrates of subordinate districts, be required to give security that there are no opium-smokers in their respective departments. Let a joint memorial be sent in, at the close of every year, representing the conduct of those officers who have connived at the practice. The Criminal Board will communicate this decision to the Boards of Civil Appointments and Military Affairs: and a general order will be sent to the governors of all the provinces, that they may yield obedience, and act accordingly." It remains to be seen whether the increased severity of the law will operate in restraining or abolishing a habit, whose prevalence has rendered opium the *only* article of commerce that could be carried with success to the prohibited ports on the coast of China.

The following statement shows that opium has of late formed about *one half* of the total value of British imports at Canton and Lintin, and that tea has constituted something less than the same proportion of our exports:—

Imports in 1833.	Dollars.	*Exports in* 1833.	Dollars.
Opium . . .	11,618,167	Tea	9,133,749
Other imports .	11,858,077	Other exports . .	11,309,521
	23,476,244		20,443,270

The amount of the opium, imported by us, has thus been greater than that of the tea exported. The pernicious drug, sold to the Chinese, has exceeded in market value the wholesome leaf that has

Mandarin with Opium Pipe.

been purchased from them; and the balance of the trade has been paid to us in silver. The opium of late certainly exhibits a decrease in sale amount, compared with some former years; but the effect of the new law against it in China remains yet to be fully ascertained. Its consumption, at least until that law was passed, pervaded all classes, and had spread with astonishing rapidity through the country. The mode of inhaling it is different from the common pipe used in smoking tobacco, as may be seen from the preceding cut.

As tea has always held so principal a place in our intercourse with China, it requires some particular consideration, as an article of commerce. We have seen before, that the fineness and dearness of tea* are determined by the tenderness and smallness of the leaf when picked. The various descriptions of the black diminish in quality and value as they are gathered later in the season, until they reach the lowest kind, called by us Bohea, and by the Chinese (*Ta-cha*) "large tea," on account of the maturity and size of the leaves. The early leaf buds in spring, being covered with a white silky down, are gathered to make Pekoe, which is a corruption of the Canton name, *Pak-ho*, "white down." A few days' longer growth produce what is here styled "black-leaved Pekoe." The more fleshy and matured leaves constitute Souchong; as they grow larger and coarser they form Congou; and the last and latest picking is Bohea. The tea farmers, who are small proprietors or cultivators, give the tea a rough preparation, and then take it to the contractors, whose business it is to adapt its further preparation to the existing nature of the demand. The different kinds of tea may be considered in the ascending scale of their value.

1. Bohea, which in England is the name of a

* Chapter xix., p. 322.

quality, has been already stated to be, in China, the name of a *district* where various kinds of black tea are produced. The coarse leaf brought under that name to this country is distinguished by containing a larger proportion of the woody fibre than other teas; its infusion is of a darker colour, and, as it has been more subjected to the action of fire, it keeps a longer time without becoming musty than the finer sorts. Two kinds of Bohea are brought from China: the lowest of these is manufactured on the spot, and therefore called "Canton Bohea," being a mixture of refuse Congou with a coarse tea called Woping, the growth of the province. The better kind of Bohea comes from the district of that name in Fokien, and, having been of late esteemed equally with the lower Congou teas, has been packed in the same square chests, while the old Bohea package is of an oblong shape.

2. Congou, the next higher kind, is named from a corruption of the Chinese *Koong-foo*, "labour or assiduity." It formed for many years the bulk of the East India Company's cargoes; but the quality gradually fell off, in consequence of the partial abandonment of the old system of annual contracts, by which the Chinese merchants were assured of a remunerating price for the better sorts. The consumption of Bohea in this country has of late years increased, to the diminution of Congou, and the standard of the latter has been considerably lowered. A particular variety, called *Campoi*, is so called from a corruption of the original name, *Kien-poey*, "selection—choice;" but it has ceased to be prized in this country, from the absence of strength—a characteristic which is stated to be generally esteemed beyond delicacy of flavour.

3. Souchong (*Seaou-choong*, "small or scarce sort") is the finest of the stronger black teas, with a leaf that is generally entire and curly, but more young than in the coarser kinds. What is called "Padre

Souchong" is packed in separate paper bundles, of about half a pound each, and is so fine as to be used almost exclusively for presents. The probability is, that its use in that way by the Catholic missionaries first gave rise to the name. The finest kinds of Souchong are sometimes scented with the flowers of the *Chloranthus inconspicuus*, and *Gardenia florida*; and they cannot be obtained, even among the Chinese, except at dear prices. A highly crisped and curled leaf, called *Sonchi*, has lately grown into disrepute and been much discussed, in consequence of being often found to contain a ferruginous dust, which was probably not intended as a fraud, but arose from the nature of the ground, where the tea had been carelessly and dirtily packed.

4. Pekoe being composed mainly of the young spring buds, the gathering of these must, of course, be injurious in some degree to the future produce of the shrub, and this description of tea is accordingly both dear and small in quantity. With a view to preserving the fineness of flavour, the application of heat is very limited in drying the leaves, and hence it is, that Pekoe is more liable to injury from keeping than any other sort of tea. There is a species of Pekoe made in the green-tea country from the young buds, in like manner with the black kind; but it is so little fired that the least damp spoils it; and for this reason, as well as on account of its scarcity and high price, the Hyson-pekoe, as some call it, has never been brought to England. The mandarins send it in very small canisters to each other, or to their friends, as presents, under the name of *Loong-tsing*, which is probably the name of the district where the tea is made.

Green teas may generally be divided into five denominations, which are: 1, Twankay; 2, Hyson-skin; 3, Hyson; 4, Gunpowder; 5, Young Hyson. Twankay tea has always formed the bulk of the green teas imported into this country, being used by the

retailers to mix with the finer kinds. The leaf is older, and not so much twisted or rolled as in the dearer descriptions: there is altogether less care and trouble bestowed on its preparation. It is, in fact, the *Bohea* of green teas: and the quantity of it brought to England has fully equalled three fourths of the whole importation of green. "Hyson skin" is so named from the original Chinese term, in which connection the *skin* means the *refuse*, or inferior portion of anything; in allusion, perhaps, to the hide of an animal, or the rind of fruit. In preparing the fine tea called Hyson, all those leaves that are of a coarser, yellower, and less twisted or rolled appearance, are set apart and sold as the refuse or "skin tea," at a much inferior price. The whole quantity, therefore, depends on, and bears a proportion to, the whole quantity of Hyson manufactured, but seldom exceeds two or three thousand chests in all.

The word Hyson is corrupted from the Chinese name, which signifies "flourishing spring," this fine sort of tea being of course gathered in the early part of the season. Every separate leaf is twisted and rolled by hand, and it is on account of the extreme care and labour required in its preparation that the best Hyson tea is so difficult to procure, and so expensive. By way of keeping up its quality, the East India Company used to give a premium for the two best lots annually presented to them for selection; and the tea merchants were stimulated to exertion, as much by the credit of the thing, as by the actual gain in price. Gunpowder, as it is called, is nothing but a more carefully picked Hyson, consisting of the best rolled and roundest leaves, which give it that *granular* appearance whence it derives its name. For a similar reason the Chinese call it *Choo-cha*, "pearl tea." Young Hyson, until it was spoiled by the large demand of the Americans, was a genuine, delicate young leaf, called in the original language *Yu-tsien*, "before the rains," because

gathered in the early spring. As it could not be fairly produced in any large quantities, the call for it on the part of the Americans was answered by cutting up and sifting *other* green tea through sieves of a certain size; and, as the company's inspectors detected the imposture, it formed no portion of their London importations. But the abuse became still worse of late, (as we shall presently see,) for the coarsest *black* tea leaves have been cut up, and then *coloured* with a preparation resembling the hue of green teas.

Nothing could be more ill-founded than the vulgar notion, once prevalent in this country, that the colour of green tea was derived from its being dried on plates of copper. Admitting that copper were the metal on which they were placed, it does not at all follow that they should assume such an appearance from the operation; but the pans really used on these occasions are of cast iron, of the same round or spherical shape as the tatch described under the head of chymistry. Each of these pans is bricked in, over a small furnace. A quantity of fresh leaves are placed in the pan, after it has been sufficiently heated, and stirred rapidly round by the hand, to expose them equally to the action of the heat, and at the same time prevent their burning. After being a little curled by this drying operation, they are taken out and twisted or rolled by hand to assist the natural tendency; and the process of curling is continued for a longer or shorter time, according to the nature and quality of the tea. The hand seems to have most to do in the case of green teas, and the fire in that of the black. In the preparation of the finer teas, much care and attention is bestowed on the selection of the *best leaves* subsequent to drying; as in the separation of the hyson from its *skin*, or refuse—a business which falls to the lot of women and children. The tea, when prepared, is first of all put up in baskets, and subsequently packed by the

contractors in chests and canisters. The black teas are trodden down with the feet, to make them pack closer: but the green-tea leaves would be crushed and broken by so rude a process; they are accordingly only shaken into the chests.

It is a question of some importance, how far a sudden increase in the demand for tea at Canton is calculated to injure its average quality. The essential service derived by the East India Company from their experienced inspectors, who, from long practice, acquired that readiness in discriminating the slightest shades of quality, which nothing but practice can confer, have demonstrated the expediency of such professional persons being still employed under the free-trade system; by all those, at least, who are not rash enough to trust to themselves, or to the Chinese. One of the inspectors, Mr. Reeves, junior, informed the writer of this, at the close of 1833, that he had detected many attempts to pass off spurious or adulterated teas among the black kinds. The greater portion, indeed, of a particular description of tea, distinguished by the term *Ankoi*, were mixed with spurious leaves. These were of various kinds, but appeared generally to be largish leaves cut up, though it was found impossible to ascertain the trees or shrubs to which they belonged. The two most prevalent were a thick, soft, dark-green leaf, very smooth, and a palish hairy leaf, with the veins strongly marked. The former is not detected easily, and only by inspecting the leaves after infusion, as it imparts no bad smell to the tea, and is hardly perceptible even to the taste; the latter is readily discovered by its giving to the tea a "faint and odd" smell, as well as taste.

But this was nothing in comparison with the effrontery which the Chinese displayed in carrying on an extensive manufactory of *green* teas from *damaged black leaves*, at a village or suburb called Honan, exactly opposite to the European factories, but

divided from them by the river. The remission of the tea duties in the United States occasioned, in the years 1832 and 1833, a demand for green teas at Canton which could not be supplied by the arrivals from the provinces. The Americans, however, were obliged to sail with cargoes of green teas within the favourable season; they were determined to have these teas; and the Chinese were determined they should be supplied. Certain rumours being afloat concerning the manufacture of green tea from old black leaves, the writer of this became curious to ascertain the truth, and with some difficulty persuaded a Hong merchant to conduct him, accompanied by one of the inspectors, to the place where the operation was carried on. Upon reaching the opposite side of the river, and entering one of these laboratories of factitious Hyson, the party were witnesses to a strange scene.

In the first place, large quantities of black tea, which had been damaged in consequence of the floods of the previous autumn,* were drying in baskets with sieve bottoms, placed over pans of charcoal. The dried leaves were then transferred in portions of a few pounds each to a great number of cast-iron pans, imbedded in chunam or mortar, over furnaces. At each pan stood a workman stirring the tea rapidly round with his hand, having previously added a small quantity of *turmeric* in powder, which of course gave the leaves a yellowish or orange tinge; but they were still to be made green. For this purpose some lumps of a fine blue were produced, together with a white substance in powder, which, from the names given to them by the workmen, as well as their appearance, were known at once to be *prussian blue* and *gypsum*.† These were triturated finely together with a small pestle, in such proportion as reduced the dark colour of the blue

* See p. 29. † Prussiate of iron and sulphate of lime.

to a light shade; and a quantity equal to a small teaspoonful of the powder being added to the yellowish leaves, these were stirred as before over the fire, until the tea had taken the fine bloom colour of Hyson, with very much the *same scent*. To prevent all possibility of error regarding the substances employed, samples of them, together with specimens of the leaves in each stage of the process, were carried away from the place.

The tea was then handed in small quantities, on broad shallow baskets, to a number of women and children, who carefully picked out the stalks, and coarse or uncurled leaves; and, when this had been done, it was passed in succession through sieves of different degrees of fineness. The first sifting produced what was sold as Hyson skin, and the last bore the name of Young Hyson. As the party did not see the intermediate step between the picking and sifting, there is reason believe that the size of the leaves was first reduced by chopping or cutting with shears. If the tea has not highly deleterious qualities, it can only be in consequence of the colouring matter existing in a small proportion to the leaf;* and the Chinese seemed quite conscious of the real character of the occupation in which they were engaged; for, on attempting to enter several other places where the same process was going on, the doors were speedily closed upon the party. Indeed, had it not been for the influence of the Hongist who conducted them, there would have been little chance of their seeing as much as they did.

It is an interesting and important question to determine, whether the same system of artificial colouring enters at all into the manufacture of the

* The turmeric and gypsum are perfectly innocuous, but the prussian blue, being a combination of prussic acid with iron, is a poison

more genuine green teas brought to this country. Mr. Brande, in his skilful and minute analysis of black and green teas, about fifteen years since, detected the presence of a colouring substance in the samples of green upon which he operated, which, as far as it goes, is proof positive; and some presumptive proof is afforded by the peculiar properties so universally attributed to green tea, in its exercising a powerful and hurtful influence on the nervous system. One fact is well ascertained and undeniable: the Chinese themselves do not consume those kinds of green tea which are prepared for exportation. The *Yu-tsien* mentioned before, and the Pekoe made from the green-tea plant, already described, have a yellower, and as it were a more *natural*, hue than the bluish green that distinguishes the elaborated teas imported by us. If deleterious substances are really used, our best safeguard consists in the minute proportions in which they must be combined with the leaves.

Of the 31,500,000 lbs. of tea which, on an average of the four last years of the company's charter, were imported into this country, the proportion of green to black has been about one to five. Various reasons conduce to make the black a preferable article of consumption to the majority. It is not only cheaper than the green, but it abounds much more in that quality termed "strength," and is, besides, with the exception of the Pekoe kind, capable of being kept for a long time without any perceptible deterioration. It would be useless to pretend that the long sea voyage, in which the equator is twice crossed, and the water in which the ship floats is often heated to between 80° and 90°, has no ill effect on tea cargoes. With an *absolute and complete* absence of all humidity, we know that heat has little or no decomposing effect: but such a state cannot be the ordinary characteristic of a ship's

hold, as must be clear to all who have found the difficulty of preserving some articles from damage between this and India. Black tea is better able to contend with the chances of injury, to which a cargo may be exposed, than green.* It has generally been subjected in a much greater degree to the action of fire in drying, and has, besides, less delicacy of flavour than the other. Instances have been known of black tea being kept in this country for ten years, or even longer, without suffering perceptibly; and the Chinese themselves generally lay it by for a year in preference to using it fresh. There seems upon the whole little difficulty in accounting for the superior condition in which green tea, especially, is said to be found in Russia. The same circumstance of a land journey, which makes it come dearer to the consumer,† tends at the same time to preserve its quality, for the region which it traverses is generally dry as well as cold.

In no instance has a greater revolution taken place in the habits of a people, than in that which tea has effected within the last hundred years among the English. It was known, about the middle of the seventeenth century, rather as a curiosity than an article of use, as appears from an entry in Pepys's Gossiping Diary, dated 1661, in which the writer says that he "sent for a cup of tea, a Chinese drink, of which he had never drunk before." About the beginning of the last century it came more into use; and the following statement exhibits the surprising strides which it has from time to time made, in the space of just one hundred years, towards its present universal consumption —

* Some of the company's finest Hyson teas were packed in double cases of wood, besides the canisters.

† The lowest retail price at St. Petersburgh is between five and six shillings English, and the highest is said to be above thirty-eight shillings per pound.

	lbs.
1734	632,374
1746	2,358,589
1758	4,205,394
1768	6,892,075
1785	10,856,578
1800	20,358,702
1833	31,829,619

In 1806 the excise duty was raised to ninety per cent., and in 1819 to nearly one hundred per cent., on the sale price of all teas—a tax which must have had a powerful effect in checking the growth of consumption. In spite, however, of this, it is well known that the importations into this country have exceeded the aggregate consumption of the whole western world besides. By a letter written from Siberia to Canton, in 1819, it appears that the quantity annually carried to Russia amounted to 66,000 chests, containing about 5,000,000 lbs., and no material increase has since taken place. The French trade with Canton seems lately to have shown a tendency to increase. A year or two since, there were as many as four French ships at Whampoa or Lintiu, where it was formerly unusual to see one; and a French consul has been appointed since 1828. Up to 1832, the consumption of tea in France barely equalled 250,000 lbs.; but a notion, that it was an antidote to cholera, is said to have brought it more into use.

In the year 1832, no less than seventeen Dutch vessels visited China from Holland or Batavia, though the importations into Holland of tea do not exceed 2,000,000 lbs. per annum. A Danish ship now and then arrives at Whampoa; but the consumption of Denmark has been no greater than that of France. In all other countries of Europe, tea, if sold at all, is generally met with as a drug, and hardly looked upon by the merchants as an object of trade. Next to the British trade, the most con-

siderable in tonnage and value at Canton has been that of the United States; subject, however, to fluctuations from which our own has been free. The remission of the tea duties, already alluded to, gave it, in 1833, a sudden stimulus, and the exports and imports at Canton, on the part of the Americans, each of them exceeded eight millions of dollars on board of nearly fifty small vessels. In consequence, however, of the losses sustained upon the teas, the American tonnage in the following year, 1834, was greatly reduced, nor was it expected very soon to reach its previous amount. The annual consumption of teas, in the United States, has been commonly estimated at about 8,000,000 lbs. Until the year 1824 our North American colonists, in Canada and Nova Scotia, were chiefly supplied with teas smuggled across the lakes from the northern states of the Union; but in that year the East India Company began to send an annual provision of about three ship loads of cheap teas to Quebec and Halifax, which had the effect of altogether stopping the American supply.

We may conclude with some observations concerning our present knowledge of the ports and harbours on the coast of China—a point of considerable importance, in the event of any future extension of the trade beyond that narrow limit, to which it has been so long confined by the unbending policy of the Tartar rulers of China. The survey of the China seas, under the auspices and at the expense of the East India Company, was begun in 1806 and terminated in 1819, having been carried on in two ships at the annual charge of 13,000*l*. By a late report from Captain Horsburgh to the Foreign Office, it comprises the whole coast from Teen-pak, lat. 21° 22′, long. 111° 13′ east, to the Lamock islands, lat. 23° 30′, long. 117°. It includes all the channels in the proximity of the Canton river, and the same river as far as the anchorage at Whampoa. To this

may be added the south and east coasts of the island of Haenan, and some of the seas and straits to the southward. A cursory survey of the gulf of Pechele, north of the Shantong promontory, was made, as before noticed, by Captain Ross and Captain Basil Hall, during Lord Amherst's embassy: but, for the purposes of navigation, the whole eastern coast, from the Lamock islands to the Shantong promontory, remains to be hydrographically laid down.

The report to the Foreign Office, which has been throughout confirmed by individual experience, states that abundant safe harbours exist all along the coast for merchant ships, or for vessels of war in case of need. Captain Horsburgh enumerates the following: Near Canton, Toong-koo bay, as well as Capsingmoon, is well known, together with the southwest side of Lintin in the northerly monsoon; Tay-tam bay, on the south side of Hong-kong island, affords shelter in all winds; Mir's bay, or Ty-po-hae, in lat. 22° 30′, presents a good anchorage in the northeast, and tolerable shelter in the southwest monsoon; Namo island, in lat. 23° 30′, long. 117° 10′, forms a harbour between itself and the main land; Amoy (Hea-mun) is a fine shelter for any number of large ships; Chin-chew, (Tseuenchow,) in lat. 25°, affords good protection in the southwest monsoon; Ting-hae, lat. 26° 10′, near the entrance of the river Min, leading to Foochowfoo, is a secure harbour for large vessels; the Chusan group presents safe anchoring ground in several places; exclusive of the fine harbour fronting the city of Chusan, with the river of Ning-po a few leagues to the westward. The report further states that, between Chusan and the promontory of Shantong, the whole coast is almost entirely unknown. It seems, however, to have been lately ascertained that the entrance of the river of Shang-hae, in Keangnan province, lat. 31° 10′, is available to small ves-

sels ; and it can scarcely be doubted that Foochow-foo, in Fokien, and the above-mentioned port of Shang-hae, would be by far the most eligible points for the establishment of the British trade, in regard to both imports and exports.

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